



CITY AND COUNTY OF NEWCASTLE UPON TYNE

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1953



CITY AND COUNTY OF NEWCASTLE UPON TYNE


ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1953



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29905151>

CONTENTS

PAGE

HEALTH COMMITTEE AND SUB-COMMITTEE AS TO NATIONAL HEALTH SERVICE ACTS	4
--	---

INTRODUCTION	7
--------------------	---

I.—GENERAL.

Vital Statistics	15
Natural and Social Conditions.....	20
Statistical Tables	23

II.—NATIONAL HEALTH SERVICE.

Care of Mothers and Young Children.....	32
Report of Dental Officer.....	38
Midwives' Service.....	42
Premature Baby Service	43
Health Visitors	47
Home Nursing Service	51
Vaccination and Immunisation.....	54
Ambulance Service.....	57
Health Education.....	63
Maternity and Child Welfare Almoner's Report.....	64
Domestic Help Service	67
Mental Health Services.....	68
National Assistance Acts, 1948 & 1951.....	77

III.—INFECTIOUS DISEASES.

Notifications, Deaths, Ward Distribution, etc.....	81
Special Skin Clinic.....	87
Venereal Diseases.....	88

IV.—TUBERCULOSIS.

Report of the Chest Physicians.....	93
Mass Radiography.....	101
Contact Clinics	102

V.—REPORT OF CHIEF SANITARY INSPECTOR 107

VI.—REPORT OF VETERINARY OFFICER..... 137

VII.—SCHOOL HEALTH SERVICE..... 155

APPENDICES.

APPENDIX I.—WORK OF THE NEWCASTLE EXECUTIVE COUNCIL..	167
APPENDIX II.—CURRENT AND FUTURE PROBLEMS IN CHILD WELFARE	168
APPENDIX III.—ONE HUNDRED YEARS AGO—NEWCASTLE UPON TYNE, 1853	174
APPENDIX IV.—TUBERCULOSIS IN CHILDHOOD IN NEWCASTLE UPON TYNE.....	180

HEALTH COMMITTEE.

1953.

The Lord Mayor (Ald. W. McKeag).

Coun. Mrs. I. McCambridge (Chairman).

„ Mrs. M. B. Fenwick (Died 1/10/1953).

Ald. J. Chapman, M.B.E.

Ald. Mrs. V. H. Grantham.

„ A. C. Curry, D.C.L., J.P.

„ Mrs. D. A. Fitzpatrick.

Coun. R. M. Henderson, J.P.	Coun. Mrs. R. A. Dixon (until 4/11/53).
„ Mrs. C. C. Scott, J.P.	„ T. D. Smith.
„ A. Howie.	„ R. G. Hutton (Vice- Chairman).
„ W. G. Benn.	„ Dr. D. R. Milligan.
„ C. W. Dix (from 4/11/53).	„ J. McKenzie, J.P. (from 4/11/53).

SUB-COMMITTEE AS TO NATIONAL HEALTH SERVICE ACTS.

The Sub-Committee as to National Health Service Acts consisted of the above members of the Health Committee, together with the following representatives of other bodies :—

British Medical Association and

Local Executive Council Dr. H. F. Wattsford.

Durham University Prof. Sir J. C. Spence, M.C.

Voluntary Bodies Miss Teresa Merz, O.B.E., J.P.
Miss F. E. Pybus.

Education Committee Coun. P. H. Edwards.

S T A F F .

W. S. WALTON, G.M., M.D., B.Hy., D.P.H.,
Medical Officer of Health and Principal School Medical Officer.

G. HAMILTON WHALLEY, M.B., B.S., B.Hy., D.P.H.,
Deputy Medical Officer of Health.

SHIRLEY M. LIVINGSTON, M.B., B.S.,
Child Welfare Medical Officer.

General Administration : Chief Clerk, Deputy, 12 Clerks, 4 Typists,
Public Relations Officer.

Sanitary Inspection : Chief Sanitary Inspector, Deputy, 21 Inspectors,
3 Assistant Inspectors, 6 Clerks, 2 Typists.

Food Inspection : Veterinary Officer, 5 Inspectors, 9 Rodent Operators,
2 Clerks.

Maternity and Child Welfare : 22 Clinic Medical Officers (part-time), Chief Nursing Officer, Deputy Chief Nursing Officer, Health Visitor Tutor, 50 Health Visitors, 2 Almoners, 1 Orthopaedic Nurse, 1 Supervisor of Midwives, 1 Assistant Supervisor, 46 Midwives, 16 Clerks, Dental Officer, 2 Dentists and 1 Anæsthetist (all part-time), 1 Dental Mechanic and 1 Receptionist.

District Nursing : 1 Supervisor, 1 Assistant Supervisor, 44 Nurses (including 6 males), 1 Clerk.

Domestic Help : 1 Organiser, 3 Assistant Organisers, 5 Clerks, 338 Domestic Helps (51 full-time, 287 part-time).

Day Nurseries : Superintendent Matron, Superintendent Warden, 2 Clerks, 7 Nurseries with Matrons, Assistant Matrons, Wardens, Nurses and Domestic Staff.

Vaccination and Immunisation : Administrative Officer (part-time), 8 Clinic Medical Officers (part-time), 3 Nurse-Clerks, 2 Clerks.

Ambulance Service : Ambulance Officer, 1 Assistant, 11 Clerks and Typists, 95 Drivers, Mechanics, etc., 5 Foremen, 2 Female Attendants.

Mental Health : 1 Medical Director (part-time), 4 Duly Authorised Officers, 2 Mental Health Visitors, Occupation Centre Supervisor, 2 Assistant Supervisors and Domestic Staff.

Chest Clinics (Care and After-Care) : 2 Chest Physicians (part-time), 2 Clinic Medical Officers (part-time), 2 Almoners, 2 Clerks (full-time) and 2 Clerks (part-time).

B.C.G. Vaccination : 1 Medical Officer (part-time) and 1 Clerk.

Skin Clinic : 4 Attendants.

School Health Service : Senior School Medical Officer, 6 Assistant School Medical Officers, Senior Dental Officer, 7 Assistant Dental Officers, 5 Physiotherapists, 23 Nurses, 8 Nursing Helpers, 18 Clerks and Clinic Attendants, 1 Dental Mechanic.

*To the Lord Mayor, Aldermen and Councillors of the
Newcastle upon Tyne City Council.*

MY LORD MAYOR, LADIES AND GENTLEMEN,

I have pleasure in presenting to you the 81st Annual Report of the Medical Officer of Health which has been prepared on the lines indicated to the Council by the Ministry of Health in Circular 1/54.

During the years 1947-1952 there had been a continuous decline in the number of births but this decline was arrested in 1953 when there were 4,922 births as compared with 4,792 in 1952. A total of 3,160 deaths during the year provided the lowest return for many years. The infant mortality rate of 29.2 during the year 1952 was reduced to 26.8 in 1953 and was the lowest ever recorded for the City. This rate of 26.8 was exactly the same as that for England and Wales in 1953. It is indeed worthy of note that only seven years ago, in 1947, 286 babies failed to reach the age of one year whereas in 1953, 132 babies died before the first birthday anniversary. Forty years ago—in 1913, 908 deaths occurred in children under one year of age and the population has not varied numerically very much during that time.

Reports relating to the 1951 Census have been received from the Registrar General and some extracts are included in appropriate sections of this report. A study of the trends in the age grouping of City residents in the 1921, 1931 and 1951 figures, as set out in the table printed on page 16, will reveal much of interest to those who follow social changes in Newcastle. There were, for instance, in 1921 over 55,000 children in the 5-14 age group and there were 40,052 children within the corresponding range in 1951. During the same period (1921-1951) there was also a considerable reduction in the age group 15-24 of from 50,832 to 38,833. Against these spectacular reductions are to be set off the increases in the age ranges over 45 and particularly in the number of persons over 65 years of age which has risen from 12,276 in 1921 to 28,725 in 1951. It is now estimated that one person in ten living in the City has reached an age of over 65 years.

Housing remains a great problem. 1,570 houses were built during the year bringing the post war total to approximately 8,000. Much

that was stated in my report of last year regarding housing remains true. The one per cent. sample tables of the General Register Office then quoted have been replaced by the actual census figures which are summarised on page 22 so far as housing defects are concerned. The proportion of 0.89 persons per room in Newcastle is one of the highest recorded for any area in England and Wales (1951). Reference to slum clearance will be found on page 108.

One hundred years ago, in 1853, when the population of Newcastle upon Tyne was about one-third of what it is now, a very severe outbreak of Cholera swept through the town. In appendix III will be found a summary of the findings of the three Commissioners appointed by the General Board of Health. A hundred years is a long time and things have changed very much during that time but the extracts make interesting reading. While we are not now "arrested at the door by a darkness which is little less than total" (section 29) nevertheless there are still houses where "we are obliged to wait a moment before we can see sufficiently well to grope our way" and there are rooms where artificial light burns most of the day. Shared sanitation and shared water supply are not uncommon in the City to-day as reference to page 22 will readily show. This report of the Public Inquiry held by the Commissioners concludes as far as Newcastle is concerned with an ideal dissertation (section 100) on the value of preventive measures coupled with "preventive expenditure", if life and health are to be efficiently guarded and if large sums of emergency expenditure are to be avoided.

There was a considerable reduction in the number of notified cases of infectious diseases (7,294) when compared with those notified (13,118) in 1952. Chickenpox and Measles remained prevalent and 111 cases of Dysentery and 44 of Food Poisoning were closely investigated. Pulmonary Tuberculosis notifications (476) showed an increase over those for the previous year (430) but the number of deaths reached the lowest figure yet recorded of 93 (81 Pulmonary and 12 Non-Pulmonary). The main report on Tuberculosis will be found commencing on page 93 and a supplementary section on Tuberculosis in Childhood is set out as appendix IV.

A short synopsis of the work carried out by the School Health Service is given in this Report and gratitude is expressed to the Education Committee and the Director of Education for their help in the extensive refitting of the clinics. With the coming into action of the new Central Clinic and strengthening of staff, particularly in

the medical and dental services, the School Health Service is now very efficient and able to meet most of the demands placed upon it. The provision of reports from hospitals and arrangements for close co-operation with the General Practitioners added considerably to the efficiency of the Service.

The routine work of the environmental health services and of the inspection of meat, milk and other foods, and of premises associated with food, continue to give the public an efficient protective service. The work carried out by the Sanitary Inspectors' Department and by the Veterinary Department does not usually attract much public attention except when there has been some case of default by suppliers or by the occurrence of some health nuisance. Routine supervision nevertheless receives day to day attention and perusal of the detailed reports will show the amount of work which has constantly and efficiently been carried out.

The Health Committee, during the year, increased their drive towards securing a less polluted atmosphere. It is a strange reflection that compels us to admit that while food, water and milk supplies are carefully supervised and protected in order to guard the alimentary tracts of members of the general public, state and local legislation has but little interest in the protection of the very delicate and sensitive membranes lining the respiratory tracts of the same general public. In the Commissioners' Report of 1854 (*vide supra*) attention was drawn in Section 82 (page 178 Appendix III) to the excessive contamination of the atmosphere in Newcastle. Progress during the subsequent hundred years has not been rapid and contamination of the atmosphere still exists as "a considerable source of detriment to the sanitary condition of the town."

Domestic users of ordinary house coal would not willingly or knowingly scatter dirt, grit and fumes over the curtains, washing and living rooms of their neighbours. Yet, this happens on a large scale when a considerable proportion of the total smoke pall over the City has originated from the household chimneys. Ordinary coal burning in the domestic grate is a potentially 'smokeful' fuel. Production of smoke is much increased usually immediately after starting the fire or when burning the coal in old fashioned grates, or during long banking up periods or after carelessly replenishing a low fire with a large mass of cold fuel. The householder burning coal has a responsibility to his fellow citizens and there have been welcome signs recently that more care is being taken in residential areas.

Increased supplies of smokeless fuels, which are not much more expensive in the long run, are becoming available, better types of fire grates are now in supply and Industry is becoming more conscious of up-to-date methods of reduction of smoke emission. Steps to be taken towards the provision of smokeless zones in the City were considered by the Health Committee towards the end of the year.

Within the space of a few years, it should be possible to report that the City is receiving a greater proportion of the sunshine which nature makes available for inhabitants of this north eastern corner of the country. In 1953, there were recorded 940 hours of sunshine in the City, yet only 15 miles away at Cockle Park 1,396 hours were available, or nearly half as many hours again. The incidence of certain respiratory diseases especially bronchitis and probably cancer of the lung, would be materially reduced if parts of the City could have a cleaner atmosphere.

The Ambulance Service carried 125,486 patients and covered 736,183 miles. The Committee's policy of development now enables this Service to meet demands under most conditions likely to arise.

Another excellent year of service was put in by the domiciliary nursing services including the midwives, health visitors, district nurses, nursery nurses and by the home help service. As was mentioned last year, the City Council in providing care for people in their own homes is performing a service which is of the greatest value to the public. Full details of these domiciliary services were given in the special survey report submitted last year and accounts of work carried out during 1953 are given in the National Health Services section of this report.

The excellent relationship between the Local Health Authority and the Executive Council as described in the survey report of 1952 were continued and developed still further. Both authorities serve the same area and the same people and their agreed arrangements are giving a well co-ordinated medical and nursing service in the homes of the people. The personal relationships in this joint work have been outstanding and sincere tribute is due to Mr. K. N. Ogden, the Clerk to the Newcastle upon Tyne Executive Council, and to Dr. H. F. Wattsford and Dr. F. J. Robertson, the Chairman and Secretary of the Local Medical Committee.

Sincere tribute is due to the Regional Hospital Board for making their consultant services so readily available to the City Health Services. The increased provision of beds for tuberculosis has greatly

facilitated early admission of patients and waiting lists have virtually disappeared. Much remains, however, to be done so far as Newcastle is concerned in measures for providing an adequate number of beds for mental deficiency, for mental treatment, for the chronic sick and for the maternity services.

Councillor Mrs. M. B. Fenwick, member of the Health Committee since November, 1945 and Chairman of the Committee during the years 1949 and 1950, died in October, 1953. She had been associated with the Health Committee during all the changes which had occurred during the post war period and since the coming into operation of the National Health Service Act. She had worked unsparingly throughout for the Committee.

I would like to express, on behalf of the Health Department staffs, our appreciation for the help and interest of the Chairman, Councillor Mrs. McCambridge, and of the members of the Health Committee throughout the year. Grateful thanks and acknowledgment of excellent service are due to members of the administrative, clerical, technical, nursing and medical staffs.

I am,

My Lord Mayor, Ladies and Gentlemen,

Your obedient Servant,

W. S. WALTON,

Medical Officer of Health.

*Health Department,
Town Hall,
Newcastle upon Tyne, 1.
August, 1954.*

CITY AND COUNTY OF NEWCASTLE UPON TYNE

I—GENERAL

MORTALITY TABLES,
SOCIAL CONDITIONS, CLIMATOLOGY,
WATER SUPPLY, CREMATION, etc.

SUMMARY OF STATISTICS, 1953.

Population	289,700.		
Area	11,401 acres.		
Birth Rate	Crude....	17·06 per 1,000 population.	
	Corrected	16·55	„ „
Death Rate	Crude....	10·90	„ „
	Corrected	11·88	„ „
Infant Mortality Rate	26·82 per 1,000 live births.		
Neo-Natal Mortality Rate	19·91	„	„
Maternal Mortality Rate	0·59 per 1,000 live and still births.		
Tuberculosis Death Rate :—			
All forms	0·321 per 1,000 population.		
Pulmonary	0·280	„	„
Non-pulmonary.....	0·041	„	„
Infectious Diseases Death Rate	0·052	„	„
Marriage Rate	17·36	„	„
Inhabited Houses.....	85,844.		
Rateable Value.....	£2,878,733.		
Product of 1d. rate.....	£11,746 7s. 0d.		

GENERAL STATISTICS.

POPULATION.—The mid-year population, as estimated by the Registrar-General, was 289,700, and represents a decrease of 100 on the 1952 estimated population.

The table below shows the population trends in different age groups revealed by comparing the Census figures for the years 1921, 1931 and 1951. (Unfortunately there was no Census taken during 1941.)

Age Group.	1921. Population 275,009. (M.134,116 F.140,893)		1931. Population 283,156. (M.137,351 F.145,805)		1951. Population 291,724. (M.138,997 F.152,727)	
	No.	%	No.	%	No.	%
0-4	27,416	9.9	23,407	8.3	26,135	8.9
5-14	55,294	20.2	51,568	18.2	40,052	13.7
15-24	50,832	18.5	51,250	18.0	38,833	13.4
25-44	81,079	29.5	82,309	29.2	87,764	30.1
45-64	48,112	17.5	58,168	20.5	70,215	24.1
65-74	9,331	3.3	12,462	4.4	20,155	6.9
75+	2,945	1.1	3,992	1.4	8,570	2.9
Total	275,009	100.0	283,156	100.0	291,724	100.0

BIRTHS.—There were 4,922 live births recorded, representing a crude birth rate of 17.06 per 1,000 population, as compared with a rate of 16.54 for the year 1952. The City birth rate is higher than that for England and Wales—15.5, and is slightly higher than the rate for the 160 large towns, viz., 17.0 per 1,000 population.

In addition to the above, there were 118 still-births, representing a still-birth rate of 23.4 per 1,000 live and still births.

LIVE BIRTHS.				STILL BIRTHS.		
SEX.	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.
Male ..	2,417	97	2,514	60	4	64
Female	2,303	105	2,408	49	5	54
Totals .	4,720	202	4,922	109	9	118

DEATHS.—The net deaths amounted to 3,160, equivalent to a crude rate of 10.9 per 1,000 population, as compared with a rate of 11.81 in 1952. The death rate for England and Wales in 1953 was 11.4, whilst the rate for the 160 large towns was 12.2.

INFANTILE MORTALITY.—132 infants died before completing the first year of life, representing a rate of 26.8 deaths per 1,000 live

births, compared with the England and Wales figure of 26·8 and 30·8 for the 160 great towns.

Of the 132 infant deaths, 98 occurred before attaining the age of one month, making a neo-natal mortality rate of 19·91 per 1,000 live births. Once again prematurity accounted for the greatest number of deaths in this group.

MATERNAL MORTALITY.—3 maternal deaths occurred during the year, producing a mortality rate of 0·593 per 1,000 live and still births, a decrease from the figure for 1952, viz., 1·016 (5 deaths). The England and Wales maternal mortality rate for 1953 was 0·76.

TUBERCULOSIS.—93 persons died from various forms of tuberculosis during the year, 81 being from pulmonary and 12 from non-pulmonary tuberculosis. The equivalent death rates are as follows: All forms 0·321, pulmonary 0·280, and non-pulmonary 0·041 per 1,000 population.

These rates, whilst lower than last year, are still higher than the England and Wales figure of 0·20 per 1,000 population for all forms of tuberculosis, and they are also higher than the rate for the 160 large towns, viz., 0·24.

INFECTIOUS DISEASES.—This group now forms only a very small proportion of the total deaths in the City. There were only 15 deaths during the year (excluding diarrhoea, pneumonia and tuberculosis), representing a rate of 0·05 per 1,000 population, as compared with 0·06 for 1952.

MARRIAGES.—2,514 marriages took place during the year, representing a marriage rate of 17·36 per 1,000 population. For comparison purposes, the rates for the past 10 years are set out below :—

Year.	Population.	No. of Marriages	Marriage Rate.
1953.....	289,700	2,514	17·36
1952.....	289,800	2,692	18·58
1951.....	291,700	2,664	18·27
1950.....	294,800	2,648	17·97
1949.....	294,540	2,807	19·06
1948.....	293,600	2,880	19·6
1947.....	290,470	2,771	19·1
1946.....	283,740	2,832	19·9
1945.....	265,990	2,935	22·1
1944.....	262,920	2,479	18·8

ACCIDENTS.—The Chief Constable reports an increase in the number of street accidents which took place during the year, viz., 1,891, as against 1,555 in 1952. It is estimated that 1,597 of these accidents could have been prevented by the exercise of greater care, and it is of some concern to note that there was a considerable increase

in the number of children under the age of 15 years who were killed and injured, particularly the latter, as shown in the following table :—

	Under 5 years.		5-10 years.		11-15 years.		Total.	
	1953	1952	1953	1952	1953	1952	1953	1952
Killed	1	3	4	..	1	1	6	4
Injured	82	39	94	70	58	22	234	131

Accidents which occur in the home are not normally reported and therefore accurate statistics are not available, but it has been authoritatively stated that the home is more dangerous than the roads. Certainly this is true at the extreme ages of life, *i.e.*, under five and over sixty-five. Falls, scalds and burns are the three main groups, the falls being largely due to infirmity with bad lighting and ill-fitting footwear contributing, whilst burns and scalds could in almost every case be attributed to sheer carelessness. Of 171 home accidents which were brought to the notice of the Health Visitors 46 were due to falls and 95 to burns and scalds.

NURSING HOMES.—There are 7 Nursing Homes registered in the City, with a total bed accommodation of 118. 30 of these beds are for maternity cases. All homes were inspected during the year.

CREMATION.—The following table shows a slight increase in the total number of cremations carried out.

Yr.	Newcastle Residents.		Non-N/c. Residents Cremated.	Total. Cremations.	% annual increase in Cremations.	% of N/c. to non-N'castle Cremations.	% of N/c. to total Cremations.
	Nett Deaths.	Cremations.					
	1	2	3	4	5	6	7
1935	3,672	84	104	188	44·61 †	80·76	44·09
1936	3,878	109	161	270	43·61	67·70	40·37
1937	3,864	142	235	377	39·62	60·42	37·66
1938	3,621	206	279	485	28·64	73·83	42·67
1939	3,661	261	376	637	31·34	69·41	40·98
1940	3,733	304	412	716	12·40	73·48	42·45
1941	3,951	340	583	923	28·91	58·31	37·92
1942	3,480	354	643	997	8·01	55·05	35·50
1943	3,709	403	784	1,187	19·05	51·40	33·95
1944	3,508	512	1,027	1,539	29·64	49·85	33·26
1945	3,435	566	1,152	1,718	11·69	49·13	32·95
1946	3,515	645	1,414	2,059	19·84	45·61	31·32
1947	3,747	830	1,747	2,577	25·15	48·09	32·20
1948	3,475	824	1,973	2,797	8·53	42·26	29·46
1949	3,757	970	2,446	3,416	22·13	39·65	28·39
1950	3,925	1,136	2,951	4,087	19·64	38·49	27·79
1951	3,900	1,121	3,306	4,427	8·20	33·90	25·32
1952	3,424	1,111	2,751	3,862	..	40·38	28·77
1953	3,159	1,121	2,915	4,036	4·5	38·45	27·82

† Estimated.

The Medical Referee required 35 post-mortem examinations (42 in 1952), largely because of the time elapsing between death and the deceased person being last seen by a doctor. Copies of the findings are sent to the doctors concerned. Only 3 (2 in 1952) post-mortems required further investigation involving analysis. Cremation was refused on two occasions.

HEALTH CONTROL OF AIRPORT.

The year saw the start of regular services between Woolsington Airport and the Continent and as a result there was a considerable increase in the volume of duties imposed by the Public Health (Aircraft) Regulations, 1952, and the Aliens Order, 1920.

In June thrice weekly services between Paris, Dusseldorf via Amsterdam, and Basle via Luxembourg, were inaugurated by Messrs. Hunting Clan Air Transport Ltd., but after one month the Basle/Luxembourg Service was suspended and the remaining two services reduced to twice weekly. Later, in October, the Paris service was suspended.

The Aircraft Regulations exempt passengers from certain countries from the requirements of medical inspection, but duties as Medical Inspector of Aliens under the Aliens Order, 1920, make the attendance of a Medical Officer necessary at every arrival of aircraft from these "excepted" countries, as well as from those countries to whom the Regulations apply. If there are no alien passengers on board, however, his services are not required. To carry out these combined duties necessitated the attendance of the Medical Staff on 121 occasions in all. 66 of the arriving aircraft carried alien passengers.

The work carried out is summarised as follows :—

Number of Aircraft arriving from Continent.	
Dusseldorf/Amsterdam	58
Paris	38
Basle/Luxembourg	13
Oslo	4
Helsinki/Oslo	3
Gothenburg	2
Copenhagen	1
Hamburg	1
Tonsberg	1
	<hr/>
	121
	<hr/>
No. of passengers arriving	1,061
	<hr/>

(British 742, Finnish 77, Dutch 62, Norwegian 49, Swedish 48, German 44, French 28, American 4, Jordanese 4, Danish 2, Swiss 1).

NATURAL AND SOCIAL CONDITIONS.

GEOLOGY.—The geological formation of the area consists of heavy clay on the top of hard sandstone, which overlies coal seams.

CLIMATOLOGY.—The weather during 1953 was little different from the previous year. There was less sunshine and less rain, but the mean maximum and minimum temperatures were slightly higher than in 1952. The following table summarises the recordings taken at Leazes Park, King's College, Cockle Park (Morpeth), and Hexham. It will be noticed that the so called "holiday" months—July and August—were the wettest months of the year.

METEOROLOGICAL RECORDS, 1953.

Month.	SUNSHINE HOURS.			LEAZES PARK.		
	King's College.	Hexham.	Cockle Park.	Rainfall (inches).	Temperature °F.	
					Mean Max.	Mean Min.
January ..	33·3	43·5	64·0	0·78	42·7	33·9
February .	35·8	60·0	64·3	1·73	44·3	35·6
March ...	83·5	139·25	182·1	0·09	51·7	34·8
April	110·6	137·75	161·6	2·45	53·2	36·9
May	170·2	140·5	189·4	2·00	65·6	47·2
June	85·1	90·0	119·5	2·05	65·8	49·3
July	124·0	134·25	134·83	3·13	69·8	52·3
August ...	142·1	151·25	170·4	4·20	71·3	50·1
September	100·4	125·75	134·07	1·82	64·2	47·9
October ..	35·2	109·05	92·9	1·29	55·2	39·6
November	6·7	57·25	37·8	0·74	50·23	38·83
December.	12·8	24·75	45·1	0·79	45·64	36·0
Total...	939·7	1213·3	1396·00	21·07	....	....
Average	78·3	101·1	116·33	1·75	56·64	41·87

WATER SUPPLY.—Details relating to the City's water supply are shown in the Chief Sanitary Inspector's section of this report (see page 119).

SEWERAGE.—There are 447·9 miles of sewers in the City, discharging directly into the Tyne at various points along the 8½ miles of river frontage.

CLEANSING AND SCAVENGING.—A weekly collection of refuse is made from the whole of the domestic premises, and twice weekly from certain business premises.

SOCIAL CONDITIONS.—The following table shows the nature of the main types of work engaged in by the citizens of the City, and also the number of persons not gainfully occupied or retired. These figures are based upon the one per cent. extraction system adopted from the 1951 Census by the Registrar-General and while obviously not strictly accurate give a definite indication of the distribution of workers. The number of women at work has increased considerably since the 1931 Census.

OCCUPATION ORDERS AND STATUS AGGREGATES.

	<i>Males</i> (15 & over)	<i>Females</i> (15 & over)	
Total	104,300	121,300	
Occupied	92,900	44,900	
Not gainfully occupied and retired ..	11,400	76,400	
Retired.....	(7,900)	(1,000)	
			<i>Total.</i>
Metal Manufacture, Engineering and Allied Trades	19,600	900	20,500
Clerks and Typists	8,300	12,700	21,000
Commerce (not clerical)	8,700	5,900	14,600
Personal Service (Institutions, Clubs, etc.)	2,000	12,500	14,500
Transport and Communications	11,600	—	11,600
Unskilled Workers	9,600	1,700	11,300
Non-Metalliferous Products (other than Coal)—			
Pottery, Glass, Fireclay	600	200	800
Professional and Technical	4,800	2,800	7,600
Paper Printers, Bookbinders	600	1,000	1,600

The number of registered male and female unemployed at the beginning and end of the year is shown in the following table supplied by the Ministry of Labour and National Service.

Date.	Men.	Boys.	Women.	Girls.	Total.
12th January, 1953	3,445	155	1,576	236	5,412
7th December, 1953	2,668	30	1,328	34	4,060

The decrease of 777 men during the year included 380 building and contracting workers and numerous small decreases in other industries; among women the decrease of 248 was mainly among hotels and catering workers (—110) and distributive workers (—120). Regarding young persons, the decreases of 125 boys and 202 girls were due to the incidence of the school leaving periods, *i.e.*, the registers of unemployed young persons increase at the end of the school term, gradually decrease as the school leavers enter employment and then build up again at the end of the next school term.

INHABITED HOUSES.—There are 85,844 inhabited houses, which, on the estimated population, shows an average of 3·37 persons per dwelling.

The 1951 Census revealed that there were 87,561 private households occupying 82,633 structurally separate dwellings. (This is an increase of 33 per cent. on the 1931 Census figures.) The number of persons per room in the City was 0·89, which is amongst the highest for the Country. Other interesting extracts from the Census relating to housing show that 12 per cent. of households are in shared dwellings and that 19·4 per cent. occupy one or two rooms only. 7·32 per cent. of all persons were living more than two per room, which is a considerable improvement on the figure of 23·49 in 1931. Of the total households, 16 per cent. were sharing W.C. accommodation, 39 per cent. were either sharing or were entirely without a fixed bath (mainly the latter), whilst 18 per cent. were sharing or were without a piped water supply in the house.

RATEABLE VALUE.—A penny rate produced £11,746 7s. 0d., the gross rateable value being £2,878,733, as against £2,851,971 in 1952.

Vital Statistics of Whole City during 1953, and previous years.

YEAR.	Population estimated to Middle of each Year.	LIVE BIRTHS.			TOTAL DEATHS REGISTERED IN THE CITY.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE CITY.			
		Uncorrected Number	Net.		Number	Rate.	of Non-residents registered in the City	of Residents not registered in the City	Under 1 Year of Age.		At all Ages.	
			Number	Rate.					Number	Rate per 1,000 Nett Births.	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1916	278,107	7,332	7,248	26.2	4,875	17.5	680	232	899	123	4,427	15.9
1917	278,107	6,548	6,495	23.4	4,646	16.7	718	246	732	113	4,174	15.0
1918	278,107	6,555	6,468	23.3	5,380	19.3	872	308	692	107	4,816	17.3
1919	275,099	6,793	6,674	23.3	5,358	19.5	737	234	806	120	4,855	17.6
1920	286,061	8,433	8,070	28.0	4,609	16.1	779	195	817	101	4,025	14.0
1921	278,400	7,720	7,284	26.2	4,602	16.5	817	142	699	96	3,927	14.1
1922	281,600	7,432	6,987	24.8	4,698	16.7	831	145	646	92	4,012	14.2
1923	283,800	6,961	6,367	22.4	4,298	15.1	789	150	623	98	3,659	12.9
1924	285,900	7,029	6,335	22.2	4,607	16.1	929	172	632	100	3,850	13.5
1925	286,300	7,031	6,215	21.6	4,732	16.5	989	165	550	88	3,908	13.6
1926	284,700	6,728	6,007	21.0	4,460	15.7	979	161	530	88	3,642	12.8
1927	288,500	6,215	5,395	18.7	4,468	15.5	1,058	178	474	88	3,588	12.4
1928	281,500	6,360	5,429	19.2*	4,683	16.6	1,178	179	447	82	3,684	13.1
1929	283,400	6,120	5,126	18.1	5,040	17.8	1,313	172	438	85	3,899	13.8
1930	283,400	6,190	5,223	18.4	4,665	16.5	1,232	133	384	74	3,566	12.6
1931	283,600	6,058	5,056	17.8	4,911	17.3	1,251	145	467	92	3,805	13.4
1932	285,100	6,006	4,883	17.1	4,579	16.0	1,174	134	370	76	3,539	12.4
1933	286,500	5,770	4,712	16.4	4,695	16.4	1,182	127	359	76	3,640	12.7
1934	287,050	5,848	4,695	16.4	4,823	16.8	1,322	145	389	83	3,646	12.7
1935	292,700†	5,895	4,666	16.0	5,040	17.3	1,489	121	400	86	3,672	12.6
1936	290,400	5,709	4,537	15.6	5,148	17.4	1,421	151	408	90	3,878	13.1
1937	290,400	5,996	4,796	16.5	5,107	17.6	1,403	160	435	91	3,864	13.3
1938	291,300	6,101	4,678	16.1	4,866	16.7	1,413	168	307	66	3,621	12.4
1939	293,400	5,855	4,646	15.8	4,804	17.0	1,328	185	289	62	3,661	12.9‡
1940	255,900	5,501	4,519	17.6	4,727	18.5	1,181	187	284	64	3,733	14.6 [
1941	254,960	4,599	4,176	16.4	4,905	19.2	1,208	254	315	76	3,951	15.5 [
1942	254,100	4,686	4,289	16.9	4,398	17.3	1,140	222	255	59	3,480	13.7 [
1943	254,890	5,162	4,548	17.8	4,759	18.7	1,235	185	291	64	3,709	14.6 [
1944	262,920	6,799	5,359	20.4	4,585	17.4	1,298	221	270	50	3,508	13.3 [
1945	265,990	5,950	4,836	18.2	4,469	17.7	1,234	200	192	40	3,435	13.0 [
1946	283,740	8,219	6,079	21.4	4,569	16.1	1,242	188	249	41	3,515	12.4
1947	290,470	8,512	6,449	22.2	4,726	16.3	1,190	211	286	44	3,747	12.9
1948	293,600	7,414	5,705	19.4	4,504	15.3	1,215	186	217	38	3,475	11.8
1949	294,540	6,916	5,377	18.3	4,740	16.1	1,215	232	213	39	3,757	12.7
1950	294,800	6,473	5,051	17.1	4,720	16.0	1,110	315	170	34	3,925	13.3
1951	291,700	6,053	4,803	16.5	4,535	15.5	976	341	166	34	3,900	13.4
1952	289,800	5,982	4,792	16.5	4,099	14.2	1012	337	140	29	3,424	11.8
1953	289,700	6,313	4,922	17.1	4,040	13.9	1018	137	132	27	3,159	10.9

* Calculated on a population of 282,200.

† Rates calculated on a population of 291,025.

[Civilians only.

‡ Death-rate calculated on a population of 283,200.

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE FOR 1953.

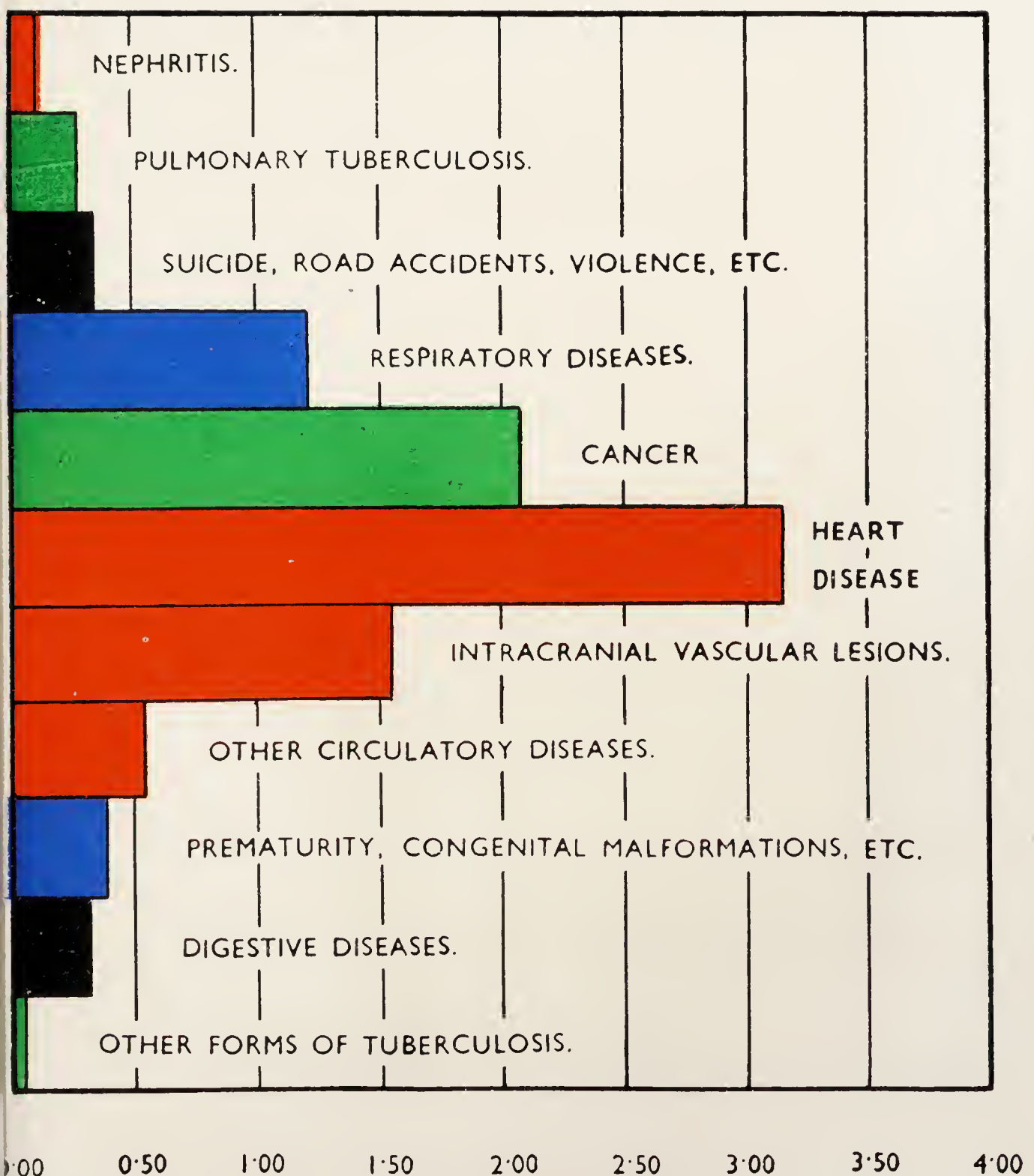
(REGISTRAR-GENERAL'S RETURN).

CAUSES OF DEATH.	Sex	All Ages.	0-	1-	5-	15-	25-	45-	65-	75-
1—Tuberculosis, respiratory	M.	48	..	..	..	5	9	25	5	4
	F.	33	..	..	..	3	18	11	1	..
2—Tuberculosis other	M.	8	1	1	..	1	1	3	..	1
	F.	4	..	1	1	..	1	..	1	..
3—Syphilitic disease	M.	2	..	..	..	..	..	..	2	..
	F.	..	..	..	..	..	..	..	..	..
4—Diphtheria	M.	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..
5—Whooping cough	M.	1	..	1	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..
6—Meningococcal infections	M.	..	..	..	..	..	..	..	..	..
	F.	1	1	..	..	..	..	..	..	..
7—Acute poliomyelitis	M.	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..
8—Measles	M.	1	..	1	..	..	..	..	..	..
	F.	1	..	..	1	..	..	..	..	..
9—Other infective and parasitic diseases	M.	7	2	..	1	1	1	2	..	..
	F.	4	1	1	..	..	..	..	1	1
10—Malignant neoplasm, stomach	M.	66	..	..	..	..	4	28	18	16
	F.	46	..	..	..	..	1	18	13	14
11—Malignant neoplasm, lung, bronchus	M.	99	..	..	..	..	7	54	32	6
	F.	14	..	..	..	..	3	7	4	..
12—Malignant neoplasm, breast	M.	..	..	..	..	..	..	..	..	..
	F.	37	..	..	..	..	6	16	7	8
13—Malignant neoplasm, uterus	F.	28	..	..	..	..	4	17	5	2
14—Other malignant and lymphatic neoplasms	M.	185	..	..	..	2	4	48	73	58
	F.	123	..	..	1	1	6	41	36	38
15—Leukæmia, aleukæmia	M.	5	..	..	..	..	1	4	..	..
	F.	4	..	..	..	1	..	3	..	..
16—Diabetes	M.	4	..	..	..	..	1	..	..	3
	F.	13	..	..	1	..	1	3	3	5
17—Vascular lesions of nervous system	M.	193	..	..	..	1	..	37	60	95
	F.	259	..	..	..	1	6	46	74	132
18—Coronary disease, angina	M.	310	..	..	..	..	13	120	103	74
	F.	183	..	..	..	..	2	52	69	60
19—Hypertension with heart disease	M.	32	..	..	..	..	1	10	13	8
	F.	24	..	..	..	..	1	2	7	14

CHIEF CAUSES OF DEATH AT ALL AGES

RATES PER 1000 POPULATION

1953



Causes of Death at different periods of life for 1953—*continued*.

CAUSES OF DEATH.	Sex	All Ages.	0-	1-	5-	15-	25-	45-	65-	75-
20—Other heart disease	M.	152	..	..	..	3	5	24	34	86
	F.	217	..	..	..	1	10	37	45	124
21—Other circulatory disease	M.	77	..	..	..	..	6	9	26	36
	F.	84	..	..	..	2	1	7	21	53
22—Influenza	M.	5	..	..	..	..	..	2	..	3
	F.	12	..	..	..	..	..	2	2	8
23—Pneumonia	M.	83	5	..	..	..	2	22	21	33
	F.	57	5	2	..	1	5	6	8	30
24—Bronchitis	M.	110	2	..	..	..	1	33	45	29
	F.	55	2	2	..	..	1	6	19	25
25—Other diseases of respiratory system	M.	17	..	..	..	..	2	7	5	3
	F.	12	..	..	..	3	..	2	1	6
26—Ulcer of stomach and duodenum	M.	15	..	..	..	..	2	7	5	1
	F.	8	..	..	..	..	1	1	1	5
27—Gastritis, enteritis and diarrhoea	M.	4	1	..	..	..	..	1	2	..
	F.	9	3	..	..	..	1	3	..	1
28—Nephritis and nephrosis	M.	13	..	1	..	1	2	5	3	1
	F.	17	..	..	..	1	1	6	4	5
29—Hyperplasia of prostate	M.	24	..	..	..	..	..	3	4	17
30—Pregnancy, childbirth, abortion	F.	2	..	..	..	..	2	..	..	..
31—Congenital malformations	M.	21	14	1	2	2	1	1	..	..
	F.	21	17	..	1	1	..	2	..	..
32—Other defined and ill-defined diseases	M.	141	42	1	1	3	8	31	20	35
	F.	170	28	3	1	2	11	39	32	54
33—Motor vehicle accidents	M.	20	..	1	4	..	6	4	3	2
	F.	4	..	..	1	1	1	1	..	..
34—All other accidents	M.	34	6	..	1	4	8	7	3	5
	F.	17	2	2	..	..	..	3	3	7
35—Suicide	M.	14	..	..	..	..	4	2	5	3
	F.	10	..	..	..	..	2	5	2	1
36—Homicide and operations of war	M.	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..
All causes	M.	1691	73	7	9	23	88	490	482	519
	F.	1468	59	11	7	18	85	336	359	593

CANCER DEATHS AND DEATH RATES FROM 1935
AND DEATHS FROM CANCER OF RESPIRATORY ORGANS SHOWING AGE AND SEX DISTRIBUTION.

	Total Number of Cancer Deaths	Death Rate per 1,000 Popula- tion	RESPIRATORY ORGANS ONLY									
			Males.				Total	Females.				Total
			Under 25	25-45	45-65	Over 65		Under 25	25-45	45-65	Over 65	
1935	433	1.49	..	1	13	7	21	..	1	6	2	9
1936	413	1.39	..	4	10	5	19	..	..	5	3	8
1937	389	1.34	1	4	15	4	24	..	..	3	..	3
1938	444	1.52	..	7	20	10	37	1	..	7	2	10
1939	457	1.61	..	4	20	9	33	..	1	2	5	8
1940	474	1.85	..	5	37	6	48	..	1	6	4	11
1941	510	2.00	..	4	24	6	34	..	..	2	4	6
1942	510	2.01	..	5	33	12	50	1	2	7	6	16
1943	533	2.09	..	4	43	11	58	..	3	7	7	17
1944	519	1.97	..	3	30	19	52	..	1	4	4	9
1945	510	1.92	1	2	30	13	46	..	2	15	6	23
1946	538	1.90	1	5	37	19	62	..	..	12	5	17
1947	514	1.77	..	4	43	21	68	..	..	10	9	19
1948	590	2.01	..	7	56	22	85	..	1	7	9	17
1949	558	1.89	..	6	44	21	71	..	..	9	13	22
1950	644	2.18	..	3	55	34	92	..	..	10	7	17
1951	585	2.01	..	6	52	27	85	..	2	8	8	18
1952	614	2.12	..	5	58	30	93	..	1	10	10	21
1953	607	2.09	..	7	54	38	99	..	3	7	4	14

CANCER DEATHS IN AGES (MALE AND FEMALE)—1953.

26A

SITE.			Under 1 year	1 year & under 2 years	2 years & under 5 years	5 years & under 15 years	15 years & under 25 years	25 years & under 45 years	45 years & under 65 years	Over 65 years	TOTAL	
			M F	M F	M F	M F	M F	M F	M F	M F	M F	M F
141	Malignant neoplasm of tongue	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	4 ..	4 ..
143	Do.	of floor of mouth	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..
144	Do.	other parts of mouth and mouth un- specified	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	2 ..	3 ..
145	Do.	mesopharynx	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 ..	2 ..
148	Do.	pharynx unspecified	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..
150	Do.	oesophagus	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	3 3	9 7	13 10
151	Do.	stomach	.. ..	.. ..	.. ..	.. ..	.. ..	3 1	26 19	34 25	63 45
152	Do.	small intestine in- cluding duodenum	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 ..	2 ..
153	Do.	large intestine except rectum	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	10 6	22 27	32 34
154	Do.	rectum	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	3 3	24 8	27 11
155	Do.	biliary passages and of liver (stated to be primary site)	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 1	2 4	4 5
156	Do.	liver (secondary and unspecified)	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	3 3	6 7	9 10
157	Do.	pancreas	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	6 ..	6 6	12 6
158	Do.	peritoneum	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. 1	1 1	1 3
159	Do.	unspecified digestive organs	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..
160	Do.	antrum	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	.. 1
161	Do.	larynx	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 1	1 1	2 2
162	Do.	trachea & of bronchus & lung specified as primary	.. ..	.. ..	.. ..	.. ..	.. ..	7 1	37 4	27 3	71 8
163	Do.	lung and bronchus unspecified as to whether primary or secondary	.. ..	.. ..	.. ..	.. ..	.. ..	.. 2	16 2	11 1	27 5
164	Do.	mediastinum	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 1	2 1
170	Do.	breast	.. ..	.. ..	.. ..	.. ..	.. ..	.. 6	.. 15	.. 14	.. 35
171	Do.	cervix uteri	.. ..	.. ..	.. ..	.. ..	.. ..	.. 4	.. 14	.. 2	.. 20
172	Do.	corpus uteri	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	.. 1
174	Do.	uterus, unspecified	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 3	.. 6	.. 9
175	Do.	ovary, Fallopian tube and broad ligament	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 10	.. 1	.. 11
176	Do.	other unspecified fe- male genital organs	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	.. 1
177	Do.	prostate	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	24 ..	25 ..
178	Do.	testis	.. ..	.. ..	.. ..	.. ..	1 ..	.. ..	.. ..	.. ..	1 ..
179	Do.	unspecified male genital organs	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..
180	Do.	kidney	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..	2 ..	4 ..
181	Do.	bladder and other urinary organs	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	4 ..	9 1	13 2
190	Malignant melanoma of skin	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	.. 1
191	Malignant neoplasm of skin	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 1	2 ..	3 1
192	Do.	eye	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	1 ..
193	Do.	brain and other parts of nervous system	.. ..	.. ..	.. ..	.. ..	.. 1	1 1	4 2	.. ..	5 4
194	Do.	thyroid gland	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. 1	.. 2
196	Do.	bone including jaw bone	.. ..	.. ..	.. ..	.. ..	1 ..	.. ..	.. 1	1 ..	2 1
199	Malignant neoplasm of other and unspecified sites	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	3 ..	4 4	7 4
200	Lymphosarcoma and reticulosarcoma	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 ..	1 ..	3 ..
201	Hodgkins disease	.....	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	.. ..	1 ..	2 ..
202	Other forms of lymphoma (reticulosis)	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	.. 1
203	Multiple myeloma	.....	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 2	1 2	1 4
204	Leukæmia and aleukæmia	.....	.. ..	.. ..	.. ..	.. ..	.. 1	1 ..	4 3	.. ..	5 4
TOTALS			.. ..	.. ..	.. ..	.. ..	2 2	15 18	129 100	204 122	350 242
COMBINED TOTALS			..	..	..	..	4	33	229	326	592

Total deaths during recent years from certain classes of disease.

	Nervous System.	Circu- latory.	Respira- tory.	Digestive.	Violent Causes.
1930 ...	256	874	469	227	137
1931 ...	250	991	509	195	158
1932 ...	232	976	413	201	161
1933 ...	237	1,003	362	213	151
1934 ...	266	935	405	215	134
1935 ...	243	1,107	391	223	130
1936 ...	276	1,283	408	266	154
1937 ...	231	1,316	470	207	139
1938 ...	233	1,216	388	205	157
1939 ...	289	1,278	307	171	189
1940 ...	420	1,115	405	154	211
1941 ...	496	972	530	157	302
1942 ...	474	847	444	130	177
1943 ...	475	915	572	138	150
1944 ...	446	987	418	136	128
1945 ...	476	994	416	115	208
1946 ...	511	996	461	105	106
1947 ...	544	983	505	139	151
1948 ...	500	990	398	153	123
1949 ...	538	1,131	549	146	127
1950 ...	502	1,285	507	110	135
1951 ...	553	1,356	531	115	141
1952 ...	489	1,221	376	93	125
1953 ...	452	1,079	351	94	99

WARD DISTRIBUTION OF BIRTHS, DEATHS, INFANT MORTALITY, TUBERCULOSIS AND OTHER
RESPIRATORY DISEASES, CANCER AND HEART DISEASE, 1953.

WARD.	Estimated Population.	Acreage (Less River Areas and Open Spaces)	Density of Population per Acre.	Births.	Birth Rate.	Deaths.	Death Rate.	Deaths under 1 year.	Infant Mortality Rate.	PULMONARY TUBERCULOSIS.				NON-PULMONARY TUBERCULOSIS				OTHER RE- SPIRATORY DISEASES.		CANCER (All Forms)		HEART DISEASE.	
										New Cases	Attack Rate.	Deaths.	Death Rate.	New Cases	Attack Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.	Deaths.	Death Rate.
Armstrong ...	14,760	239.6	61.60	356	24.12	192	13.02	11	30.75	29	1.96	5	0.34	3	0.20	1	0.07	33	2.23	29	1.97	55	3.72
Arthur's Hill	14,970	318.1	47.08	190	12.62	212	14.20	5	26.25	28	1.89	4	0.27	2	0.13	..	..	29	1.94	35	2.34	55	3.67
Benwell ...	14,740	246.8	59.73	296	20.00	139	9.45	14	47.10	31	2.10	2	0.14	3	0.20	1	0.07	17	1.15	23	1.56	27	1.83
Byker	14,160	245.4	57.69	296	21.08	151	10.64	4	13.48	25	1.77	4	0.28	4	0.28	..	..	20	1.41	19	1.34	44	3.11
Dene	14,050	865.4	16.24	170	12.10	132	9.40	2	11.68	17	1.20	2	0.14	3	0.23	1	0.07	6	0.43	35	2.49	46	3.26
Elswick ...	14,060	215.0	65.39	212	15.00	160	11.34	5	23.55	27	1.92	6	0.43	3	0.23	..	..	17	1.21	30	2.13	45	3.20
Fenham ...	16,310	650.5	25.08	215	13.18	168	10.30	3	14.82	17	1.04	2	0.12	2	0.12	..	..	13	0.79	31	1.90	59	3.65
Heaton	14,890	315.3	47.13	172	11.52	176	11.80	3	17.41	18	1.20	2	0.13	3	0.20	1	0.07	16	1.07	36	2.41	54	3.62
Jesmond ...	16,270	416.6	39.04	189	11.58	180	11.07	3	15.81	14	0.86	4	0.29	2	0.12	1	0.07	7	0.43	37	2.26	63	3.85
Kenton	23,600	1938.0	12.17	422	17.40	172	7.26	10	23.58	27	1.14	3	0.13	5	0.22	..	..	13	0.55	36	1.52	49	2.07
St. Anthony's	14,300	240.9	59.50	241	16.82	161	11.25	2	8.28	19	1.33	5	0.35	8	0.56	..	..	19	1.32	27	1.88	53	3.70
St. Lawrence	15,340	315.3	48.70	249	16.20	159	10.40	8	32.10	33	2.15	4	0.26	5	0.32	..	..	19	1.24	25	1.63	47	3.06
St. Nicholas	10,290	438.2	23.47	183	17.69	127	12.30	5	27.25	17	1.65	4	0.39	1	0.09	..	..	18	1.74	33	3.20	29	2.81
Sandyford...	14,090	245.9	57.28	218	15.43	166	11.75	7	32.00	22	1.56	1	0.07	3	0.21	1	0.07	10	0.71	27	1.91	51	3.60
Scotswood ..	15,380	395.5	38.89	260	16.92	159	10.35	6	23.04	20	1.30	8	0.51	3	0.19	..	..	21	1.36	29	1.89	45	2.93
Stephenson .	17,050	310.2	54.94	430	25.03	236	13.82	26	60.50	45	2.63	8	0.47	4	0.27	2	0.12	34	1.99	39	2.27	66	3.85
Walker	17,520	499.9	35.04	366	20.89	162	9.25	8	21.80	40	2.56	10	0.57	7	0.40	3	0.17	12	0.68	35	1.99	46	2.62
Walkergate..	14,920	525.2	28.41	220	14.75	156	10.42	6	27.20	20	1.34	4	0.27	1	0.07	..	..	9	0.60	34	2.27	57	3.82
Westgate ...	13,000	293.6	44.27	237	18.21	151	11.60	4	16.81	27	2.07	3	0.23	6	0.46	1	0.07	19	1.46	32	2.46	48	3.68
CITY ..	289,700	8705.4	33.29	4,922	17.06	3,159	10.90	132	26.82	476	1.64	81	0.28	68	0.23	12	0.04	332	1.14	592	2.06	939	3.25

TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, ZYMOTIC DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES OF THE 20 LARGE TOWNS OF ENGLAND AND WALES FOR 1953.

28A

	Birmingham.	Bradford.	Bristol.	Cardiff.	Coventry.	Croydon.	Kingston upon Hull.	Leeds.	Leicester.	Liverpool.	Manchester.	Newcastle upon Tyne.	Nottingham.	Plymouth.	Portsmouth.	Salford.	Sheffield.	Southampton.	Stoke-on-Trent.	Sunderland.
R.G.'s ESTIMATED POPULATION	1,118,500	286,600	444,200	246,600	263,000	249,800	299,400	505,500	286,500	789,700	701,800	289,700	311,500	221,400	245,800	173,900	507,600	177,100	273,700	181,550
COMPARABILITY FACTOR:—																				
(a) births	0.96	1.01	0.99	0.97	0.94	0.99	1.00	0.96	0.98	0.96	0.95	0.97	0.97	1.05	1.05	0.95	0.99	0.99	0.96	1.01
(b) deaths	1.12	0.97	0.97	1.06	1.26	0.90	1.14	1.07	1.01	1.19	1.11	1.09	1.08	1.06	1.04	1.14	1.07	1.02	1.21	1.13
CRUDE BIRTH RATE PER 1,000 POPULATION	16.60	15.9	15.63	17.93	16.1	13.8	19.1	15.7	16.04	20.3	17.41	17.06	16.64	16.45	15.21	17.05	13.90	16.01	16.45	19.5
BIRTH RATE AS ADJUSTED BY FACTOR.	15.94	16.0	15.47	17.39	15.2	13.7	19.1	15.1	15.72	19.5	16.54	16.55	16.14	17.27	15.97	16.20	13.76	15.85	15.79	19.7
CRUDE DEATH RATE PER 1,000 POPULATION	10.63	14.2	11.58	11.25	8.5	11.6	10.9	11.7	11.19	10.7	12.31	10.90	11.01	11.03	11.59	12.32	11.90	10.86	10.95	10.6
DEATH RATE AS ADJUSTED BY FACTOR.	11.91	13.8	11.23	11.93	10.7	10.5	12.4	12.5	11.30	12.7	13.66	11.88	11.89	11.69	12.05	14.04	12.73	11.08	13.25	11.98
INFANTILE MORTALITY RATE PER 1,000 LIVE BIRTHS	26.12	37.0	21.89	26.92	33.4	21.0	35.2	32.90	24.80	35.5	30.53	26.82	27.00	26.90	23.80	32.05	25.66	33.16	28.0	37.9
NEO-NATAL MORTALITY RATE PER 1,000 LIVE BIRTHS	18.04	24.5	15.12	15.82	24.7	14.0	21.7	22.90	15.44	21.8	20.87	19.91	16.39	17.02	14.98	22.95	16.30	22.22	23.0	18.9
STILLBIRTH RATE PER 1,000 TOTAL BIRTHS	23.46	19.5	17.82	21.90	19.8	23.3	27.3	20.62	27.09	24.0	28.24	23.4	20.22	20.17	28.58	30.11	25.15	26.78	25.0	21.0
MATERNAL MORTALITY RATE PER 1,000 TOTAL BIRTHS	0.58	0.21	0.99	0.00	0.47	0.85	1.36	0.62	0.85	0.30	0.80	0.593	0.77	1.88	0.52	0.33	0.55	1.37	0.00	0.55
TUBERCULOSIS RATES PER 1,000 POPULATION—																				
(a) Primary notifications:																				
Respiratory	1.11	1.06	1.135	1.334	1.7	0.76	1.16	0.83	1.24	1.75	1.06	1.643	1.67	1.03	1.06	1.403	1.095	1.479	1.085	1.25
Non-Respiratory	0.13	0.19	0.101	0.162	0.14	0.08	0.14	0.18	0.126	0.16	0.13	0.235	0.07	0.16	0.98	0.184	0.120	0.068	0.084	0.13
(b) Deaths:																				
Respiratory	0.24	0.14	0.209	0.29	0.15	0.12	0.25	0.22	0.244	0.33	0.28	0.280	0.27	0.20	0.19	0.288	0.193	0.327	0.343	0.26
Non-Respiratory	0.01	0.03	0.027	0.028	0.02	0.00	0.04	0.02	0.021	0.03	0.03	0.041	0.02	0.02	0.02	0.023	0.018	0.017	0.029	0.01
† DEATH RATES PER 1,000 POPULATION FROM:—																				
* Cancer (all forms)	2.00	2.3	1.887	1.97	1.66	2.16	1.84	1.91	1.864	1.97	2.16	2.095	1.86	1.89	1.97	2.28	2.126	2.230	2.032	2.00
Typhoid and Paratyphoid Fever	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0037	—
Meningococcal Infections	0.01	0.007	0.002	0.008	—	0.00	—	0.00	0.014	0.01	0.01	0.003	0.01	0.02	0.01	0.011	0.006	0.006	0.0073	0.02
Scarlet Fever	—	—	—	0.004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	0.01	0.007	0.004	0.008	0.015	—	0.01	0.00	0.007	0.005	0.01	0.003	0.01	0.01	0.01	—	0.008	0.017	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	0.002	0.00	—	—	—	—	—	—	—	—	—
Influenza	0.15	0.132	0.162	0.11	0.095	0.32	0.15	0.11	0.101	0.04	0.15	0.058	0.14	0.11	0.23	0.103	0.083	0.152	0.084	0.07
Measles	0.02	—	0.004	0.01	—	0.00	0.00	0.00	—	0.006	0.00	0.007	0.00	—	0.00	0.011	—	0.006	0.0037	0.01
Acute Poliomyelitis and Encephalitis	0.00	0.01	0.011	0.004	0.004	0.00	0.01	0.00	0.0035	0.0038	—	—	0.01	0.02	0.01	0.006	—	0.006	—	0.01
Acute Infectious Encephalitis ...	0.01	—	0.002	—	—	—	—	0.00	0.0035	0.001	0.00	0.007	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea (under 2 years)	0.02	0.007	0.007	0.036	0.019	0.016	0.02	0.03	0.014	0.03	0.01	0.014	0.02	0.00	0.02	0.029	0.22	0.040	0.011	0.03
Diarrhoea (under 2 years) (per 1,000 live births)	1.08	0.438	0.43	2.03	1.18	1.16	1.2	1.64	0.870	1.7	0.74	0.813	1.35	0.54	1.60	1.69	1.559	2.469	0.666	1.7

† Where no deaths have occurred a "dash" is inserted.

Where the number of deaths is too small to express as a rate the figures 0.00 are inserted.

* including Leukæmia and Aleukæmia.

II.—NATIONAL HEALTH SERVICE ACTS

MATERNITY AND CHILD WELFARE STATISTICS.

Birth Rate.

There were 2,514 male live births and 2,408 female births registered producing a crude birth rate of 17·06 per 1,000 population. Of these births 97 males and 105 females were illegitimate.

Still-Birth Rate.

There were 118 still-births giving a still-birth rate of 23·4.

Infant Mortality Rate.

98 babies died in the first month of life and 34 died between the first month and the end of their first year. This gave an infant mortality rate of 26·82 and a neonatal mortality rate of 19·91.

The infant mortality rate for the city is, happily, the lowest on record—27 ; but the fall in the number of infant deaths concerns only those children between one month and one year. The number in the first week and the period between eight days and the end of the first month are slightly higher than in 1952. The causes of death in the first week fall mainly into three big groups—prematurity, congenital malformations and a less well-defined group including asphyxia and hæmorrhage into the brain or meninges, all of which may be attributed to birth trauma. An attempt was made to find out whether the presence of congenital malformations in the infant was in any way related to virus infection in the mother during her pregnancy. Like information obtained after the event it was not very satisfactory except in a negative way. There was in no case a very definite history of virus infection, but one or two mothers had had an influenza type of illness during their pregnancy.

Maternal Mortality Rate.

The number of maternal deaths was 3, giving a maternal mortality rate of 0·593.

NATIONAL HEALTH SERVICE.

SECTION 22—CARE OF MOTHERS AND YOUNG CHILDREN.

At the end of 1953 there were nine ante-natal centres functioning providing a total of 12 weekly clinics, including one weekly and one fortnightly clinic for mothers booked into Dilston Hall Maternity Hospital, Corbridge. Attendances are still well below the numbers for the years prior to 1948. During the past year arrangements have been made for routine chest x-ray under the Mass Miniature Radiography Scheme of all mothers attending ante-natal centres.

Although the maternity bed position is still acute, the scheme for the admission of patients solely on social and domestic grounds is working satisfactorily. All these cases are referred from the hospital to the local authority and the non-medical supervisor or her deputy visits to assess the need for hospital confinement. There have been 919 of these visits made to expectant mothers during the year of whom 308, after having been acquainted with the other services available, have decided to have their babies at home.

The number of expectant unmarried mothers using mother and baby homes shows a tendency to decrease. This may be a result of the increased maternity allowances which perhaps help the parents to accept the problem and face it at home.

The attendances at the child welfare centres have been satisfactory and good work has been done in health education at the centres by health visitors using various types of visual aids. Arrangements for specialist advice and treatment through the child welfare service and with the co-operation of the general practitioners have continued to work smoothly. During the year a nursery class was started attached to the Deaf and Dumb School in the area. A small number of Newcastle children who were awaiting admission to the school were accepted and able to benefit from their attendance there with education in lip reading and the use of hearing aids.

There were 3 new registrations under the Nursery and Child Minders Regulation Act. Most of these were women who were prepared to look after 8 or 10 children of nursery class age in their own homes. This type of child care certainly fills a need in the case of mothers who have several small children and no help at home. In most cases they leave the children for the mornings only and can attend to their other jobs without the extra worry and responsibility of the children.

ATTENDANCES AT ANTE-NATAL AND POST-NATAL CLINICS DURING 1953.

(1)	Number of Women who attended during the year.		Number of New Patients who attended during the year.		Total Number of Attendances made by women included in Col. (2) during year.		Average Sessional Attendance.
	(2)	(3)	(4)	(5)	(6)	(7)	
	Ante-Natal.	Post-Natal.	Ante-Natal.	Post-Natal.	Ante-Natal.	Post-Natal.	Ante-Natal.
1953.....	2,181	65	1,674	65	7,925	65	14
1952.....	2,283	115	1,724	115	8,438	115	14

ATTENDANCES OF CHILDREN AT CHILD WELFARE CENTRES DURING 1953.

	No. of Children who attended during the year.	No. of Children who first attended centres during the year.		No. of Children in attendance at the end of the year.		Total No. of Attendances made by Children included in Col. (2) during the year.		Average Sessional Attendances 0-5 years
		Under 1 year.	Over 1 year.	Under 1 year.	Between the ages of 1 & 5 years.	Under 1 year.	Over 1 year.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1953....	9,367	3,420	693	2,854	6,003	40,401	20,369	33
1952....	9,046	3,201	691	2,883	5,651	37,652	20,577	33

Births.

2,707 live births in families belonging to Newcastle occurred in institutions as shown in the following table :—

Nursing Homes.....	11
Princess Mary Maternity Hospital	453
Hopedene Maternity Home	205
Newcastle General Hospital	1,395
Other outside Hospitals	643
Total number of Live Births	4,922
Proportion of Live Births taking place in Institutions	55.0%
Proportion in Newcastle Hospitals	41.8%

Deaths of Infants.

	1949.	1950.	1951.	1952.	1953.
Deaths of Infants during first week of life.....	79	91	87	73	81
Deaths of Infants aged one to four weeks	18	12	18	15	17
Deaths of Infants aged one to twelve months	104	67	57	52	34
Deaths from Prematurity.....	52	39	42	37	37
Deaths of Twins and Triplets....	20	24	9	9	3
Infant Mortality Rate	40	33·6	34·56	29·21	26·82
Total Live Births	5,377	5,051	4,803	4,792	4,922

Care of Illegitimate Children.

Total number of illegitimate live births..... 202

Number of unmarried mothers admitted to Mother and Baby Homes for whom the Local Health Authority assumed financial responsibility :—

Brettargh Holt	2	St. Faith's	—
Coledale Hall	3	Elswick Lodge	12
St. Agnes	5	Kendal House	1

The following table shows the illegitimate infant mortality rate compared with the overall infant mortality rate :—

Year.	Illegitimate Births.	Illegitimate Infant Mortality Rate.	Overall Infant Mortality Rate.
1949.....	270	26	40
1950.....	230	56	34
1951.....	191	42	34
1952.....	223	36	29
1953.....	202	35	27

Specialist Treatment.

Children were referred from child welfare centres for various types of specialist treatment and advice. Those referred to the Newcastle General Hospital, the Royal Victoria Infirmary and the Fleming Memorial Hospital included special defects such as squints as well as general medical and surgical conditions.

RETURN OF DEATHS UNDER ONE YEAR OF AGE DURING THE YEAR 1953.

34A

CAUSE OF DEATH.	AGE PERIODS—NET.																			
	Under 1 Week.		1 and under 2 Weeks.		2 and under 3 Weeks.		3 and under 4 Weeks.		Total under 1 Month.		1 and under 3 Months.		3 and under 6 Months.		6 and under 9 Months.		9 and under 12 Months.		Total under One Year	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Tuberculosis of Meninges and Central Nervous System .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Septicæmia and Pyæmia .....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	1
Meningococcal Infections .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Weil's Disease .....	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Acute Infectious Encephalitis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Mental Deficiency .....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..
Cerebral Hæmorrhage .....	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	1
Encephalitis .....	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Broncho-pneumonia .....	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	1	..	1	2
Pneumonia other and unspecified .....	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	2	2
Acute Bronchitis .....	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..	2
Bronchitis unqualified .....	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	2	..
Gastro-enteritis and colitis, except ulcerative. ....	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2
Spina Bifida and Meningocele .....	..	..	1	2	1	..	..	..	2	2	1	..	..	1	..	..	..	..	3	3
Congenital Hydrocephalus	2	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	2	1
Congenital Malformations of Circulatory System	1	4	1	..	..	..	..	..	2	4	2	..	1	..	..	..	..	..	5	4
Cleft Palate .....	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Congenital Malformations of Digestive System	1	1	1	1	..	..	..	..	2	2	..	..	..	..	..	..	..	..	2	2
Congenital Malformations of Genito-urinary System	1	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	2	..
Other and Unspecified Congenital Malformations	1	2	..	..	..	..	..	..	1	2	..	1	..	1	1	..	..	..	2	4
Intracranial and Spinal Injury at Birth	6	3	1	..	..	..	..	..	7	3	..	1	..	..	..	..	..	..	7	4
Post-natal Asphyxia and Atelectasis	6	5	..	..	..	..	..	..	6	5	..	..	..	..	..	..	..	..	6	5
Pneumonia of Newborn	1	1	..	1	..	..	1	1	2	3	..	..	..	..	..	..	..	..	2	3
Diarrhœa of Newborn .....	..	..	..	..	1	..	..	1	1	1	..	..	..	..	..	..	..	..	1	1
Hæmolytic Disease of Newborn	1	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1
Hæmorrhagic Disease of Newborn	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1
Ill-defined Diseases peculiar to Early Infancy.	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Immaturity with mention of any other Subsidiary Conditions .....	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2
Immaturity Unqualified	21	14	..	..	2	..	..	..	23	14	..	..	..	..	..	..	..	..	23	14
Certain Symptoms referable to Nervous System and Special Senses .....	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Inhalation and Ingestion of food causing obstruction or suffocation .....	..	..	..	..	..	..	..	..	..	..	1	..	2	1	..	..	..	..	3	1
Accidental mechanical suffocation in bed and cradle .....	..	..	..	..	..	..	1	..	1	..	1	1	..	..	..	..	..	..	2	1
	43	36	5	5	5	..	2	2	55	43	7	5	7	6	1	4	3	1	73	59

The orthopædic cases were referred to the Consultant Orthopædic Surgeon of the School Medical Service. The speech defects were referred to the Speech Therapist at the Child Health Department, where they could also be seen by the Ear, Nose and Throat Surgeon if there was any question of impaired hearing.

No. of children referred to Orthopaedic Department.....	141
„ „ „ „ „ for Speech Therapy	26
(including deaf or partially deaf)	
„ .. children referred to Ear, Nose & Throat Hospital ...	39
„ „ „ „ „ Eye Hospital	20
„ „ „ „ „ Royal Victoria Infirmary	22
„ „ „ „ „ Newcastle General Hospital	6
„ „ „ „ „ Fleming Memorial Hospital	11
„ „ „ „ „ for Ultra Violet Ray	56

Spastics, Epileptics and Mental Defectives.

Records of spastic children, epileptics and mentally backward or defective children are ascertained through the health visitors. The spastic children in most cases have been under specialist supervision from an early age and as they approach school age are assessed in order to decide whether or not they will be able to attend a normal school. A few have been accommodated in the Percy Hedley School for Spastics which has just recently been started by voluntary effort and help from the National Spastic Society, Limited. There are not many epileptic children definitely diagnosed as such, and all children having fits have been kept under supervision and the fits more or less controlled with drugs. Definite mental defectives are referred to the Mental Health Department, and backward children, and children suffering from epilepsy, are seen and assessed as to mental capacity by the School Medical Officer before school age.

No. of mentally defective children passed to Mental Health Department	7
No. of backward children under supervision..	15
No. of children who have had fits and are under supervision	9 (under 5). 1 (school age).
No. of spastics under supervision.....	6 (under 5). 7 (school age).

Sewing Classes.

A total of 244 classes were held at five centres. The number of attendances was 1,902—an average of eight mothers at each class.

Day Nurseries Returns.

No. of Nurseries	Total Capacity.	Children on Register 31st Dec.	Children on Register during year.	No. of attendances 0-2 years.	No. of attendances 2-5 years.	Total attendances.	Average Daily attendance (Monday-Friday)	Admissions during year.	Discharges during year.	Average Saturday Attendance
7	340	328	913	16,569	47,193	63,762	252	577	583	14

Apart from the 577 admissions shown in the table there were 191 places which were not taken.

Applications as "sole support" and "sickness of the parents" are taken into the nursery at a very early date after making the applications, without further interview. Where the applicant states housing conditions, etc., are unsatisfactory, this is usually confirmed by a Health Visitor's report. Other than these, all applicants are asked to come down to the office for further interview when a place may be offered for a period of not more than six months in the first instance and is reviewed after that time.

Figures below show the total of those in the nurseries at the end of 1953 and the reasons for their admission :—

Unmarried mothers	41	Financial difficulties	107
Widows	8	Confinement	10
Widowers	4	Doctor's recommendation ...	7
Separated or divorced	74	Housing conditions	9
Illness of mother	27	Difficult child	1
Illness of father	39	Mother nursing	1
			Total .. 328

PROBLEMS OF CHILDREN NEGLECTED OR ILL-TREATED IN THEIR OWN HOMES.

Special Cases Sub-Committee.

The first meeting of the main Co-ordinating Committee was held on the 26th October, 1951, and appointed the Special Cases Sub-Committee consisting of the following members :—

Medical Officer of Health.
Children's Officer.

Chief Nursing Officer.

Lady Almoner, Maternity and Child Welfare Department.

Superintendent School Nurse.

Organiser of Child Care, Education Department.

Head Teachers' Representative.

The first meeting of the Special Cases Sub-Committee was held on the 29th November, 1951, and since that date the following have been co-opted to the Sub-Committee :—

Inspectors of the National Society for the Prevention of Cruelty to Children.

Principal Probation Officer.

Area Officer of the National Assistance Board.

Headmistress Representative of the Head Teachers.

Regular meetings of the Special Cases Sub-Committee have been held and details of the numbers of cases considered are as follows :—

<i>Year.</i>	<i>New Cases.</i>
1951	7
1952	29
1953	20
Total	<u>56</u>

Cases have been referred to the Special Cases Sub-Committee from the following sources :—

	1951.	1952.	1953.	<i>Total.</i>
Main Co-ordinating Committee	3	..	..	3
Superintendent School Nurse	3	14	7	24
Pædiatrician, Newcastle General Hospital	1	..	..	1
Chief Nursing Officer .....	..	6	6	12
National Society for the Prevention of Cruelty to Children .....	..	7	5	12
Lady Almoner .....	..	1	1	2
Probation Service.....	..	1	1	2
Totals.....	<u>7</u>	<u>29</u>	<u>20</u>	<u>56</u>

Report on the Priority Dental Service for Nursing and Expectant Mothers and Children under School Age for the year 1953.

Throughout 1953 the Priority Dental Service was conducted by two part-time dental officers working on a sessional basis, their time being nearly equivalent to that of a full-time officer. In addition some limited assistance was provided by the officers of the School Dental Service.

Although no routine dental inspections were held, an offer of examination and treatment if required was made to every mother and child passing through the Welfare Centres, and on the whole the number of mothers and children accepting this offer was satisfactory. Particularly was this so in the case of the young children and the expectant mothers, but it was noticeable that nursing mothers who, for one reason or another had not been seen in the dental clinics prior to their confinement, seemed to be less ready to take advantage of the offer of treatment where this did not entail the supply of dentures. It seems that the dentist is still to some extent an object of dread to his patients, and while a mother is anxious to do the best she can for her child, when it comes to treatment for herself, she is often more than willing to let matters slide if this treatment is likely to be unpleasant or painful. There was, no doubt, some justification for this attitude of mind in times gone by, but to-day every effort is made in the clinics, as elsewhere one hopes, to reassure the patients, both mothers and children, and while a visit to one's dentist may never be exactly a pleasure, it certainly should to-day be devoid of the terrors that some of our patients seem to associate with it.

The work of the service over this year, both at St. Anthony's clinic and at the Central clinic has been well maintained, and the figures shown for the year compare very favourably with last year's totals. There has been a marked rise in the number of fillings in temporary teeth, while nearly three hundred dentures were constructed as against two hundred in 1952.

Most of the 5,000 teeth extracted were removed under gas and oxygen anæsthesia, and in this connection attention should be drawn to the poor facilities available both at St. Anthony's and the Central clinics for the recovery of patients who have had a general anæsthetic. While the majority of the children are fit enough to be taken home

within a short time of having had their extractions, it frequently happens that a mother who has had many teeth removed requires some considerable time to recover before she is fit to face the hazards of a journey home, and adequate recovery cubicles at both clinics should be provided.

As in former years facilities were available for our patients who required it to have their treatment undertaken in hospital, while x-ray diagnosis where necessary was carried out at the Central clinic, and close liaison with the Dental Hospital and School Dental Service was maintained throughout the year.

Details of the treatment carried out are given on next page.

DENTAL SERVICES—ST. ANTHONY’S AND CENTRAL CLINICS.

NUMBERS PROVIDED WITH DENTAL CARE DURING 1953.

	Examined.	Needing Treatment.	Treated.	Made Dentally Fit.
Expectant and Nursing Mothers	397	390	292	219
Children under five	1809	1240	1226	1179

FORMS OF DENTAL TREATMENT PROVIDED DURING 1953.

	Ex-trac-tions.	Anæsthetics.		Fill-ings.	Sealings or Sealing and gum treat-ment.	Silver Nitrate treat-ment.	Dress-ings.	Radio-graphs.	Dentures provided.	
		Local.	General.						Complete.	Partial.
Expectant and Nursing Mothers.....	2328	139	212	171	74	..	27	30	177	90
Children under five	2452	..	951	433	..	662	134	..	..	..

Home Accidents.

Since April, 1952, a record has been kept of all accidents occurring in the home which have been reported to health visitors, district nurses or other visitors, irrespective of whether hospital treatment was required or not. The picture was very much as one would expect, showing the largest numbers in the '1 - 5' and 'over 65' age groups, the causes in these groups being mainly burns and scalds in the first and falls with the old people.

The number of accidents recorded show a very high proportion in the 1 - 5 year group, which is, of course, the group which suffers most from home accidents, but perhaps the proportion is unduly large owing to the fact that these are the most likely to be reported to the health visitor.

The prevention of home accidents is a subject on which the health visitors are constantly giving advice and education, but it is found that these occur in some of the best homes with careful parents.

The table shows the type of accidents brought to our notice during 1953 related to different age groups.

Accident Survey— January, 1953—December, 1953.

Type of Accident.	Under 1 yr.	1-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	Over 65 yrs.	Total.
Burns	4	25	4	—	3	6	7	49
Scalds	3	27	1	—	2	6	7	46
Lacerations	1	16	—	1	1	4	5	28
Fractures and Dislocations	1	14	1	—	—	1	7	24
Concussion	—	1	—	—	—	—	—	1
Sprains & Bruises .	1	6	—	1	1	3	9	21
Swallowing foreign. bodies	—	1	—	—	—	—	—	1
Poisoning	—	1	—	—	—	—	—	1
Total	10	91	6	2	7	20	35	171

Number of Fatal Accidents 3 (all over 65 years of age).

SECTION 23—DOMICILIARY MIDWIFERY.

The domiciliary midwifery staff consists of the Non-Medical Supervisor of Midwives and her Assistant, the Superintendent of the Part II Pupil Midwives Hostel and her Assistant, 43 domiciliary midwives and two domiciliary midwives undertaking the care of the premature infant.

During 1953 there was an increase both in domiciliary and in hospital births. There were fewer premature living births than in 1952, but a greater number of premature still-births. There was also a higher proportion of infants born under 3lbs. 4 ozs. than in the previous year.

Almost 90% of expectant mothers booked a doctor and midwife, and approximately 73% of these cases were delivered by the midwife. An excellent team spirit continues to exist between the general practitioner, the staff of the maternity hospitals, the hospital and district almoners, home helps, health visitors, district nurses and midwives.

Extra work is still undertaken by the midwives in connection with the follow up of midwifery cases discharged from maternity hospitals before the fourteenth day, and in the accompanying of patients by ambulance to outlying hospitals. There were actually 390 cases which the midwives were called on to accompany to some hospital, and 1,593 cases for whom they were responsible after discharge from hospital.

The majority of mothers delivered on the district have had the benefit of gas/air analgesia and pethidine. The midwives wish to express their appreciation to the ambulance service staff for their help in conveying them and the gas/air analgesia machines and premature equipment to their patients' homes.

A post-graduate course for midwives was held in Newcastle, organised by the Royal College of Midwives, in March, 1953. This was the first midwives' post-graduate school to be held in the city, and it was well attended by midwives from all parts of the country. Six of the Newcastle municipal midwives were allowed to attend, given leave of absence and fees paid, and other midwives from the staff attended lectures when their duties permitted. The whole course was excellent and was greatly appreciated by all those who

attended. A paragraph from an article in the Nursing Press read as follows :—

‘ It is impossible to pay the tribute we should wish to all who played a part in making this week so memorable. We feel sure that the seeds thus sown will produce a rich harvest of intelligent interest and renewed co-operation within the midwifery service. We hope that it will not be too long before we go again to this friendly Northern city.’

Educational and midwifery lectures continue to be arranged monthly by the Newcastle branch of the Royal College of Midwives and the Northern Midwife Teachers Group of the Royal College of Midwives.

Facilities are provided for medical students from the Princess Mary Maternity Hospital, student nurses from the Royal Victoria Infirmary, and the Newcastle General Hospital, to see the work of the domiciliary midwives in the homes of the people and this opportunity proves very beneficial and is greatly appreciated.

Forty-three pupil midwives were trained in 1953. All were successful in passing the Central Midwives Board Examination.

Care of the Premature Infant.

The number of premature infants notified on the district during 1953 was :—

107 living births.

14 still-births.

Of the 107 living births 93 were ‘specialled’ by a premature baby nurse, seven premature babies being transferred to hospital within 14 days. No premature babies were entirely nursed by their own midwife.

Result of 93 “Specialled” Cases :

Birth Weight.	Survived 28 days.	Died.
2 lbs. 3 ozs. and under	—	—
2 lbs. 3 ozs. to 3 lbs. 4 ozs.	2	6
3 lbs. 4 ozs. to 4 lbs. 6 ozs.	11	7
4 lbs. 6 ozs. to 4 lbs. 15 ozs.	23	3
4 lbs. 15 ozs. to 5 lbs. 8 ozs.	39	2
Total	75	18

Of the 75 surviving babies “specialled” by a premature baby nurse :—

50 were entirely breast fed at end of one month.

8 were receiving complementary feeds at the end of one month.

17 were artificially fed at the end of one month.

Visits :—The total number of visits made by the premature infant nurses during 1953 was 2,899 plus 17 nights on duty.

Equipment :—Full sets of premature nursing equipment were issued to 83 homes during 1953.

Details of the seven premature babies admitted to hospital :—

Birth Weight.	Total.	Lived.	Died.
2 lbs. 3 ozs. and under	1	—	1
2 lbs. 3 ozs. to 3 lbs. 4 ozs.....	1	—	1
3 lbs. 4 ozs. to 4 lbs. 6 ozs.....	—	—	—
4 lbs. 6 ozs. to 4 lbs. 15 ozs.....	—	—	—
4 lbs. 15 ozs. to 5 lbs. 8 ozs.....	5	4	1
	7	4	3

Age groups of deaths of “specialled” premature babies :—

Under 24 hours	16
24 hours to 1 week	2
1 to 2 weeks	—
2 weeks to 1 month	—

Weight groups of deaths of “specialled” premature infants :—

Birth Weight.	Died under 24 hours.	Died between 24 hours and 1 week.
2 lbs. 3 ozs. and under	—	—
2 lbs. 3 ozs. to 3 lbs. 4 ozs.	6	—
3 lbs. 4 ozs. to 4 lbs. 6 ozs.	6	1
4 lbs. 6 ozs. to 4 lbs. 15 ozs.	3	—
4 lbs. 15 ozs. to 5 lbs. 8 ozs.....	1	1
TOTAL	16	2

With regard to the seven premature babies born at home but not “specialled” by a premature baby nurse, six weighed less than 2½lbs. and the other weighed under 3lbs. All died within a few minutes of birth.

Deliveries attended by Midwives.

Number of Deliveries attended by Midwives in the area during the year.

	DOMICILIARY CASES.				Total.	Cases in Institu- tions.
	Doctor not Booked.		Doctor Booked.			
	Doctor present at time of delivery of child.	Doctor not present at time of delivery of child.	Doctor present at time of delivery of child (either the booked Dr. or another). (4)	Doctor not present at time of delivery of child. (5)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Midwives employed by Authority	31	270	547	1,371	2,219	—
Midwives employed by Hospital Man- agement Committee or Boards of Gov- ernors under the National Health Ser- vice Act	—	50	—	—	50	3,644
Midwives in Private Practice (including Midwives employed in Nursing Homes).	3	—	5	—	8	374
TOTALS	34	320	542	1,371	2,277	4,018

Domiciliary Midwives attended 1,593 cases on discharge from Institutions before the fourteenth day.

There are no voluntary organisations operating in the City under arrangements with the Local Health Authority.

Summary of Municipal Midwives' Work.

No. of Ante-Natal visits.	No. of Clinic visits by mid-wives.	No. OF DELIVERIES.				No. of Nursings.
		Doctor not booked.		Doctor booked.		
		Doctor present at time of delivery of child.	Doctor not present at time of delivery of child.	Doctor present at time of delivery of child (either the booked Dr. or another.	Doctor not present at time of delivery of child.	
20,505	2,430	31	270	547	1,371	51,215

Still Births.

Among the 1,641 births attended by the municipal midwives 21 still-births occurred. In the 576 cases where midwives attended in the capacity of maternity nurse 12 still-births occurred.

Of the 5,040 city births registered 118 related to still-births, which gives a rate of 23·4 per 1,000 total births. It is very difficult to assess the causes of still-births and even if a post-mortem examination is performed the cause may still remain obscure. The following table merely shows suggested causes :—

Cases.		Cases.	
Ante-partum hæmorrhage ..	15	Prematurity	6
Placental insufficiency	17	Rh. negative	2
Foetal defects	20	Asphyxia	3
Malpresentation	9	Anoxia	8
Toxaemia of pregnancy.....	9	Other causes	29
		Total	118

Puerperial Pyrexia.

166 cases notified (127 City cases and 39 Extra Mural cases). Of the 127 City cases 115 occurred in hospital and 12 were notified from the district. The 127 City cases were visited and all recovered.

Ophthalmia Neonatorum.

The two cases reported were visited and recovered.

Notices for Medical Aid sent by Midwives.

During Pregnancy—

Ante-Partum Hæmorrhage ..	18
Miscarriages	1
Illness (miscellaneous)	10
	<hr/>
	29
	<hr/>

During Puerperium—

Rise of Temperature.....	20
Other illness of Mother.....	21
	<hr/>
	41
	<hr/>

During Labour—

Prolonged Labour	11
Uterine Inertia }	14
Malpresentation }	
Retained Placenta	1
Post-Partum hæmorrhage....	8
Ruptured Perineum	107
Other Abnormalities	12
	<hr/>
	153
	<hr/>

For Child—

Prematurity	12
Discharging Eyes	58
Congenital Defects	3
Illness of Baby	14
Still-Births	3
Rashes	6
	<hr/>
	96
	<hr/>

Total calls for mother and child—319.

Claims for fees from doctors in respect of calls from Midwives :—

	1950	1951	1952	1953
For prolonged labour—malpresentation.....	50	24	11	18
For post-partum hæmorrhage	14	8	6	6
For ante-partum hæmorrhage	10	10	9	8
For illness of mother	43	20	19	21
For illness of child	34	15	14	12
For premature birth	13	9	10	8
For discharging eyes	43	38	34	25
Ruptured perineum	117	66	46	57
Other	17	11	13	14
	<hr/>	<hr/>	<hr/>	<hr/>
	341	201	162	169
	<hr/>	<hr/>	<hr/>	<hr/>

HEALTH VISITORS.

Progress has been made during the year with the plan for decentralization of health visitors, and twelve are now working direct from welfare centres. This undoubtedly has brought them much closer to the family problems, and mothers are able to call in to see their own health visitors in the mornings or in the evenings as they so wish.

Some of the health visiting areas on the periphery of the City have extended greatly owing to new housing projects, and adjustments have been necessary to deal with the changing case-loads, and it is indeed heartening to see so many of our young families in their new houses.

A A close relationship is maintained between the hospital, the premature baby nursing service and the family doctor in the care of premature babies. In some cases daily visits for a period have been paid by the health visitor to give the mother help and guidance in the care of the baby. The health visitor continues to be concerned with the babies during the first few months of life, and it is mainly through this continued help and close liaison with the family doctor that the incidence of infection is controlled. In the homes where parentcraft is poor, frequent visiting, and demonstration where necessary, is carried out in trying to assist in the care and progress of these families.

Contact with the two general hospitals continues and a further development has extended the work to include the psychiatric hospital at St. Nicholas'. In the case of the mentally ill the health visitor has given help and assistance to the family and the patient when requested to do so by the hospital.

B A general report on the health and parentcraft of children is now given on all infants and children for adoption, thus the health visitor, who is so used to the normal family, is able to give her judgment on the home situation before a final order is made. When 'Foster Homes' in the City are to be used by the Northumberland County Council, a report is given to the County Children's Officer.

2 The number of aged needing care continues to grow, and the health visitor is becoming increasingly known, not as the infant visitor, but as the family visitor for both the young and the aged. The practitioner and the health visitor are now more and more working together for the benefit of the family as a whole. Where there are children with a physical or a mental defect the parents are given every encouragement to contact their family doctor, and the school medical service is informed if it is necessary for special school assistance.

Health Education both in the ante natal and infant welfare centres continues, and it is stimulating to see progress made in this field, and the interest displayed by mothers in the subjects for talks and discussions. In the East End of the City, St. Anthony's Welfare Centre has now started a 'mother's club' under the guidance of two health visitors. The mothers have their own committee, and this is a progressive enterprise. The subjects so far covered by this group at their monthly meetings have included Christmas cookery, House Decorating, the Care of Infants and Children in different countries, How to Remain Beautiful, etc., apart from a social evening with husbands at Christmas

time. Health talks to other women's organisations have been given by the staff when requested.

The staff have continued to co-operate magnificently in introducing student nurses, both from the Newcastle General Hospital and the Royal Victoria Infirmary, Social Science Students from Durham University, and many students from abroad, to the work of the health visitor.

Six health visitors were sent to Refresher Courses, held under the auspices of one of the recognised Health and Nursing Organisations. These Refresher Courses are not only appreciated by the staff, but are of great encouragement to the progress of the services generally.

In-service education has continued throughout the year, and several speakers have been invited to deal with subjects relevant to the progress of our services. Films have been shown and discussions held on varying aspects of the work. A joint 'study day' was held at the Royal Victoria Infirmary (by kind permission of the House Governor) on 'The Thousand Family Investigation'. Here in actual fact was demonstrated how a team can work in carrying out a survey which should undoubtedly be of benefit to most families not only throughout this City but in many others. The Central Council for Health Education gave a 'one day course' on 'Methods of Health Education' to our students.

The City library service once more co-operated in displaying suitable children's and mothers' books at some of our infant welfare centres. Cookery demonstrations were arranged by the Gas Board and were much appreciated by the mothers attending.

The housing of some of our families who would undoubtedly benefit from more accommodation is of paramount importance and the arrangements for mutual consultation which have been established with the Housing Section will enable families most needing consideration to be re-housed, particularly where health and mothercraft are being affected by the environment.

Places in the Course for Student Health Visitors during 1952-53 were not all taken up. This year the student health visitors have continued to carry a small family case-load and to work closely with the health visitor responsible for their particular area. These health visitors give only too readily of their knowledge and experience which is so valuable in the method of approach to the home. In every case the students appear to benefit from their close relationship with a small

group of families during their training period, and it is fully realised that both the patient and his home and family circumstances should be of paramount importance, in the hospital as well as in the health field.

Assistance is offered to the student by the Local Health Authority to enable them to qualify for the health visitor's certificate. A qualified tutor is available to the Course thus giving the students continued assistance and encouragement during their training. Students and staff have access to a growing library and a very pleasant lecture room for study. They receive experience in the County of Northumberland in rural health visiting, and we are always more than grateful to the County for their generous co-operation. The standard of teaching throughout the Course is high, and is reinforced by many of the University lecturers.

SUMMARY OF VISITS.

	Primary.	Subsequent.	Total.
Births	4,828	27,421	32,249
Measles	2,619	2,269	4,888
Pneumonia	304	296	600
Whooping Cough	649	799	1,448
Whooping Cough Survey .....	..	922	922
Poliomyelitis	5	5	10
Children over One Year .....	..	60,270	60,270
Hospital Cases .....	..	92	92
Expectant Mothers	858	979	1,837
Special Visits .....	..	5,734	5,734
Housing .....	..	538	538
Aged Persons	1,375	3,394	4,769
Unsuccessful Visits (Out and Removals) .....	..	23,053	23,053
Orthopædic Work	140	605	745
Orthopædic Treatments .....	..	* 3,070	* 3,070
Tuberculosis Cases	741	8,920	9,661
Tuberculosis Contacts	364	2,273	2,637
Diphtheria Visits .....	..	49	49
Venereal Diseases—Contacts .....	..	1,106	1,106
Home Accidents .....	..	218	218
Sanitary Defects .....	..	26	26
Totals	11,883	138,969	150,852
No. of Households Visited .....	..	..	100,421

* Not counted in Totals.

Infants on Visiting List.

Of 4,723 children under one year who were visited in 1953, 4,348 completed their first year, and of the remainder :—

132 died.

198 left the city.

41 could not be traced.

1 was visited only once.

3 were admitted to institutions.

The following figures are therefore based on the 4,348 who completed the first year plus 132 who died, making in all a total of 4,410 and of that total 3,284 or 74·5 per cent. attended the welfare centres.

Illness among the children visited—291 or 6·6 per cent. contracted measles ; 114 or 2·6 per cent. contracted whooping cough ; 131 or 3·0 per cent. contracted diarrhoea ; 455 or 10·3 per cent. contracted bronchitis or pneumonia.

Details as to children who should have attained the age of five years during 1953 :—

Well and attending School	4,140
Ill and not attending School	5
Left City or failed to trace	2,349
Died in 2nd year	6
Died in 3rd year	3
Died in 4th year	2
Died in 5th year	4
Total surviving whose whereabouts are known.	4,145
Total deaths	15
Total reported upon	6,509

The addresses of 844 children who left the City in 1953 were sent to the Medical Officers of Health for the districts to which they had gone.

HOME NURSING.

The service of the home nurse is appreciated most when there is sickness in the home. For a very long time this service has been looked upon as the ' poor relation ' of professional nursing, yet no other service has so clearly demonstrated what can be done by the skilled, well trained professional nurse. During 1953 the Home Nursing Service in Newcastle has continued to give a full nursing service to the community and this has become increasingly popular, both with the family doctor and his patients.

The nursing staff during the year has been increased to meet the increasing demand and this now consists of 38 female nurses and 6 male nurses, 1 superintendent and 1 assistant superintendent.

Every effort has been made to decrease the amount of travel time, and the committee has now arranged an establishment of 9 cars and 2 'Corgis' for the use of home nurses. The question of transport is very important and no doubt the services of the nurses could in many cases be increased if an even larger establishment of transport was available.

For many years the district nurse worked directly from a centre, but this did not always enable the closest relationship to be maintained between family doctor and nurse, or patient and nurse. Now every effort is made to encourage the home nurse to be fully responsible in her district and to receive messages direct from the family doctor. This ensures a much closer personal relationship between doctor, patient and nurse. Liaison with the hospitals continues to improve, and both almoners and ward sisters are making more and more contact with the individual domiciliary nurse.

During 1953 the number of new patients attended was 5,037, together with 803 carried forward from 1952, making a total of 5,840. 856 new cases were under the age of 15 years, and 1,635 were over the age of 65 years. In the case of the younger age groups much of the treatment was by antibiotics, but in the case of the older age groups a great deal of nursing care is required as many patients are incontinent and helpless. The question of night service still continues to be one that is not always adequately covered.

In-service education has continued throughout the year at the monthly meetings of the home nursing staff, and speakers and films have been made available. A very interesting discussion was held by the staff themselves on the question of the care of the cancer patient.

The home nurse continues to give valuable assistance, which is greatly appreciated, in the training of student home nurses, student health visitors, medical students and hospital nursing students, and the staff themselves no doubt gain a great deal from contact with students and visitors.

The Health Committee's scheme for training of the City District Nursing Staff was continued during the year. The course provided is comprehensive and is based upon the long experience of the Health Department in providing courses in connection with the training of midwives, health visitors and nursery nurses.

Disease Group.	Cases b/fwd. from 1952.	Number of new cases 1953.	Total cases nursed.	New Cases only. SEX.		AGE GROUPS (New Cases only).						RESULT (All Cases).				
				M.	F.	Under 1 year.	AGE GROUPS (New Cases only).					Treatment Con- tinuing.	Discharged	Referred to Hospital.	Died.	
							1-5 years.	5-15 years.	15-25 years.	25-45 years.	45-65 years.					Over 65 years.
Cardiac	93	316	409	122	194	..	..	5	21	113	177	110	153	62	84
Respiratory	47	951	998	465	486	39	86	53	173	254	282	53	821	73	51	
Hemiplegia	102	286	388	116	170	..	..	..	1	72	212	118	73	64	133
Senile	69	257	326	88	169	..	..	..	1	61	195	64	67	61	134
Tubercle	45	313	358	190	123	..	5	47	140	99	17	40	203	104	11	
Diabetes	28	40	68	10	30	..	..	1	1	9	28	36	18	7	7
Accidents	22	133	155	51	82	5	15	12	18	33	41	18	119	11	7	
Fractures	17	55	72	19	36	..	1	2	10	10	31	16	43	7	6	
Carcinoma	30	259	289	107	152	..	..	..	28	112	119	34	75	28	152
Post Operative	74	436	510	191	245	15	27	37	134	112	92	60	395	33	22	
Gynaecological	55	93	148	..	93	..	..	5	34	31	22	54	78	10	6
Post Obstetric .....	..	48	48	..	48	..	..	14	34	..	..	5	40	3	..
Neonatal	2	15	17	9	6	15	..	..	..	..	..	..	17	..	..
Stomach and Intesti- nal Complaints	20	358	378	147	211	7	19	21	48	75	160	18	314	27	19	
Sepsis	139	1361	1500	540	821	44	231	140	296	228	211	158	1236	77	29	
Rheumatism	50	70	120	15	55	..	..	3	4	27	36	68	25	14	13
Nervous Complaints ..	8	18	26	5	13	..	..	..	8	7	3	15	3	6	2
Miscellaneous	2	28	30	12	16	3	3	2	3	7	9	5	19	4	2	
TOTALS	803	5037	5840	2087	2950	128	387	341	342	954	1250	1635	872	3699	591	678

CASES REFERRED BY

Number.

General Practitioners 4,641
 Maternity and Child Welfare Dept. 44

Newcastle Hospitals—

Newcastle General Hospital 173
 Royal Victoria Infirmary 96
 Walker Gate Hospital 2
 Fleming Memorial Hospital 28
 Other Hospitals 30
 Miscellaneous 23

TOTAL 5,037

VACCINATION AND IMMUNISATION.

Diphtheria Immunisation.

The City was fortunate in having not a single case of diphtheria notified during the year, but, as could be expected, this had an adverse effect on the number of children immunised, for it is only when they are faced with the possibility of infection that some parents can be induced to take preventive action.

Table I shows the number of children immunised or re-immunised at clinics and by general practitioners during 1953, and when compared with the figures for the previous year, the decline is very obvious. This decline is causing some concern and it has, therefore, been decided to offer immunisation at every infant session at all welfare centres. This scheme will call for considerable reorganisation of the present system, but it is hoped that the offer of these increased facilities will have the desired effect and that the goal of 100 per cent. will ultimately be achieved.

Attention is drawn to Table II which shows the percentage of the child population which is considered adequately immunised. This table differs from previous years in that only children who have been immunised or re-immunised during the past five years have been taken into account when calculating the immunity index, and it will thus be seen that only 52·1 per cent. of children between the ages of 5 and 14 reach this standard of immunity. Under the old method of calculation, *i.e.*, children immunised at any time between the ages of 8 months and 14 years, the percentage would have been 83·3. It is well known that the degree of immunity diminishes with the passage of time, and the need for a revised method of calculation is very obvious, but I think it would be better if the estimated population in the age group 5–14 years could be divided into two, namely, 5–9 years and 10–14 years. By this means a more accurate measure of the immunity of school children would be obtained. For example, if one can assume that approximately 24,000 of all children in the age group 5–14 years are aged between 5–9 years inclusive and 19,105 of these have been immunised or re-immunised during the preceding 5 years, then the immunity index in this age group is 79 per cent., whilst in the higher age group of 10–14 years, the immunity index is only 13·1 per cent. From these figures one can say that the younger children are reasonably well protected.

TABLE I.

NUMBER OF CHILDREN WHO COMPLETED A FULL COURSE OF PRIMARY IMMUNISATION, OR WHO WERE RE-INOCULATED, DIVIDED INTO TWO AGE GROUPS.
(1952 figures in brackets.)

1953.	Under 5 years.	Over 5 years.	Total.
<i>Primary Immunisation—</i>			
Clinics	1,724 (1,992)	75(181)	1,799 (2,173)
Private Practitioners	1,454 (1,629)	36 (153)	1,490 (1,782)
<i>Re-inoculation—</i>			
Clinics	1,201 (1,548)	363 (566)	1,564 (2,114)
Private Practitioners	541 (580)	391 (615)	932 (1,195)
Totals—			
Primary Immunisation ...	3,178 (3,621)	111 (334)	3,289 (3,955)
Re-inoculation	1,742 (2,128)	754 (1,181)	2,496 (3,309)

TABLE II.

IMMUNISATION IN RELATION TO THE CHILD POPULATION.

NUMBER OF CHILDREN AT 31ST DECEMBER, 1953, WHO HAD COMPLETED A COURSE OF IMMUNISATION AT ANY TIME BEFORE THAT DATE (*i.e.*, AT ANY TIME SINCE 1ST JANUARY, 1939).

Age at 31/12/53, <i>i.e.</i> , Born in Year.	Under 1 1953	1—4 1952-1949	5—9 1948-1944	10—14 1943-1939	Under 15 Total
Last complete course of injections (whether primary or booster)—					
A. 1949-1953	158	12,672	19,105	2,779	34,714
B. 1948 or earlier .....	..	..	250	12,517	12,767
C. Estimated mid-year child population	4,830	18,370	42,000		65,200
Immunity Index—100A/C.....	3.3	69.0	52.1	..	53.2

Vaccination.

Attendances at the special vaccination clinics during the year have been rather poor, but it is pleasing to note from Table III below that there has been an increase in the number of babies vaccinated by general practitioners, and the total of 2,404 children vaccinated before reaching the age of one year is almost the same as last year. The percentage of children vaccinated, whilst higher than the figures for the country as a whole, gives no cause for complacency, and it has therefore been decided, as in the case of diphtheria immunisation, to offer vaccination facilities at all infant welfare centres instead of at special clinics. Our aim is to see that every healthy infant is vaccinated

at the appropriate age, not only because of the immediate protection it gives, but also because the risk of serious complications is reduced should vaccination be necessary in later life.

TABLE III.

NUMBER OF INDIVIDUALS ATTENDING FOR PRIMARY VACCINATION AND RE-VACCINATION IN 1953 DIVIDED INTO AGE GROUPS.

(1952 figures in brackets.)

Born :—	1952-53 Under 1 yr.	1949-52 1-4 yrs.	1948-39 5-14 yrs.	Before 1939 15 yrs. and over.	Total.
<i>Clinics—</i>					
Primary	667 (766)	44 (35)	10 (3)	20 (13)	741 (817)
Re- vaccination.	. . . .	— (3)	6 (4)	78 (173)	84 (180)
<i>Private Practitioners—</i>					
Primary . . .	1,737 (1,661)	84 (118)	58 (58)	78 (148)	1,957 (1,985)
Re- vaccination.	. . . .	12 (12)	35 (43)	304 (427)	351 (482)
Total Primary Vaccination	2,404 (2,427)	128 (153)	68 (61)	98 (161)	2,698 (2,802)
Total Re- vaccination	. . . .	12 (15)	41 (47)	382 (600)	435 (662)

Enteric Fevers and Cholera.

During the year 5 persons were inoculated at the clinics against enteric fever, 10 against cholera, and 7 against both diseases using the combined vaccine. In addition, 2 persons were inoculated against typhus, and 11 were given combined enteric fever and tetanus inoculations.

Whooping Cough.

The experimental whooping cough vaccination scheme, briefly mentioned in last year's report, came into operation in March, 1953, and involves the follow-up by special Health Visitors of every child who receives a full course of inoculations. The department is co-operating with the Medical Research Council in this scheme and it is not therefore proposed to give any statistical information at present beyond stating that at the end of the year a total of 1,087 children had been inoculated either at the three special clinics or by general practitioners.

AMBULANCE SERVICE.

The pattern of the demand on the Service is very similar to that of last year ; figures set out in Table I show that over all there has been an increase of 10,307 patients carried and a reduction of 42,702 miles travelled.

The patient increase can be accounted for by the development of the new demand upon the Service for the transportation of children to and from the Occupational Centres and the Spastic Schools.

The figures for the Occupational Centres show that 9,254 children have been transported and the mileage amounts to 12,021. It is gratifying to note that due to the system of linkage in the collecting and delivery of the children, it only works out at approximately 1·3 miles per child for the each-way journey.

Alarm may be felt when looking at the number of patients in Table I under the heading of City Cases—these 114,566 persons are a very large percentage of our population and there is no doubt that when compared with other Authorities, this figure is high, but it includes 2,174 non-City cases involving a total mileage of 52,926 which could not be charged to other authorities because, in the main, the patients had been in hospital longer than three months. It can be readily appreciated that this running steps up the City average considerably, as the mileage of City patients is in the region of 3·5 whilst these other cases amount to as much as 23 miles per patient.

Arrangements were made with other Authorities visiting our area for them to carry back into their own area 9,373 cases. This figure is solely made up of patients being discharged from hospital, and has no relationship to out-patient visits. While there is certain satisfaction in achieving this there is still room for improvement, for experience shows that even with the best of co-ordination it is totally impossible for outside Authorities to deal with all their cases arising in the hospital area.

Due to the changing policy, there has been a considerable drop in the income for the conveyance of patients under Section 24. This, however, is in no way an indication that there can be any reduction in establishment, as apart from the fact that we are still responsible for the administration of the cases now being done by other Authorities, our own City loads are such that at peak periods we are sorely tried to meet our commitments. During the average day 400 City cases

are transported, a large proportion of which are in respect of fixed appointments at hospitals or clinics, and usually between the hours of 10 a.m.—11 a.m. and again 2 p.m.—3 p.m. we have over 120 persons to take to hospital. It is, therefore, very necessary to maintain our establishment to meet this demand. It has been possible in the past to deal with the outside demands between these peak periods, which has meant that there has always been an even load throughout the day. Unfortunately, the changing policy has upset this and has had a deterrent effect on the overall economy of the Service.

Vehicles.

During the year the Committee placed orders for four new vehicles; these were not an addition to the fleet but replacements for some of the older vehicles which were acquired in 1948 at the inception of the Service.

The Committee also considered an overall policy of fleet replacement and recommended the City Council to a programme of replacements based on a ten-year life of the vehicle. This on the present running of the Service would mean that each vehicle would be completing some 160,000 miles.

The Committee is advised that it would be policy to give consideration to the using of diesel power units, in place of the traditional petrol engine. This has many advantages, in particular the operating costs are considerably cheaper and it may be possible to use this type of engine, particularly in the sitting case vehicles.

Due to the new vehicles coming into the fleet this year, there are some four vehicles to be disposed of. Although it is the Ministry of Health's general recommendation that these should be earmarked for Civil Defence training purposes, it is felt that these particular ones are unsuitable, both for the purpose of Driving Instruction and the fitment of 4-stretcher carrying gear.

Maintenance.

The engineering stores and workshop continued to play an important role in the everyday life of the Service, and the demands on it are naturally extending due to the ageing fleet.

It is interesting to note that even after 10 years of peace-time production, there are in many instances still difficulties and delays in obtaining certain component parts of the mass produced vehicles, and the planning and purchasing of parts for stores is one that needs

constant attention, and without it there would be considerable hold-ups and vehicle unavailability.

Statistics of the workshops reveal that during the year, 64 vehicles went through the shops for a 10,000 miles inspection and overhaul, this entailing complete strip down of the undercarriage components and replacements where needed and usually involved some 30 to 40 man hours. 239 vehicles had the routine 2,000 miles check, this operation usually takes some 10 hours, and there were 355 occasions where it was necessary to dock the vehicle for some minor repair or adjustment that had occurred between the checking periods.

During the year, 8 reconditioned engines were built up and fitted by the staff, 33 various component reconditions, ranging from water pumps, clutch assemblies, steering boxes to gear boxes and rear axles.

The painting programme for the year included 15 vehicles completely repainted both inside and out, in addition to the usual touching up and repairs to coachwork.

The internal costing system for the vehicle maintenance side of the Service shows that the total expenditure for the year amounts to £4,962 0s. 0d. In this figure is included the cost of parts, wages of engineering personnel and tyres, thus showing an overall maintenance cost of approximately 1·6 pence per mile.

First Aid.

In accordance with the Committee's policy, all new entrants to the Service have taken the necessary steps to become qualified in this subject, and the existing members of the staff have complied with the regulations and have taken their Refresher Course where applicable.

Experience gives cause to wonder whether or not the traditional First Aid Courses as laid down by the various Associations, excellent as they are, are entirely what is required for our type of work, and possibly it would be advantageous if consideration was given to the producing of a course of combined First Aid and Nursing, solely for the instruction of Ambulance Personnel. It must be remembered that 'Nursing' of the patient while in the care of the Service plays a far more predominant part in everyday life than does the application of practical First Aid.

Premises.

Unfortunately another year has passed and it is not possible to report that the Sub-station for the east of the City is in operation,

indeed worse, at the year-end the planning and costing had not been completed.

Apart from the embarrassment through lack of accommodation for the fleet, the non-existence of this Sub-station has necessitated the members of the staff responsible for the coverage of the east side of the City to endure most primitive and unsatisfactory messing conditions over the last two years.

Fortunately, it does appear that the details will be finalised early in 1954 and it is hoped that we can look forward to being in possession of the new Sub-station by the winter of this year.

Staff.

No doubt the reduction in man hours for the year is accounted for by the reduction of miles, but this is not entirely proportional due to the increase in the number of patients handled.

During the year 18 members of the operational staff have left the Service. The majority of this wastage is due to the fact that the wages of outside concerns are higher than that of the Service, and this is a matter that can give cause for concern—especially when thought is given to the ‘ type ’ of employee necessary for ambulance work.

It is unfortunate that classification of the ambulance operator has universally been grouped in the ‘ Commercial Driving Class ’, as really there is little comparison. Driving to an ambulance operator is only one part of his duties and by no means the most important. Primarily, he must be of such calibre that he inspires the confidence required of a ‘ nurse ’, his integrity and moral character must be beyond question, as at any time he may be called to fulfil the most intimate functions, and trusted to enter and carry out his duties in anyone’s home either by day or night without supervision. He must possess and be able to practise more than an elementary knowledge of First Aid and Nursing and he must be sympathetic and tolerant. Usually, the ambulance operator is the first link, both for the patient and the relative, between them and the hospital, and psychologically it is of the utmost importance that this link gives the right impressions, and portrays ‘ efficiency and confidence ’ so as to reassure patient and relative alike that the new environments that they are going to encounter are human and understanding. By having the right man to do this, there is no question that he is able to create a feeling of confidence, that psychologically must help the patient and medical personnel towards overcoming the illness necessitating the attendance at the hospital or clinic.

Sickness.

It is gratifying to be able to report that the number of days lost through sickness has slightly decreased—over the year under review the figures reveal that there were 9,088 hours lost by operational staff and 75 days by the administrative staff, as compared with last year's figures of 9,240 and 141 respectively.

Safe Driving Awards.

86 members of the staff entered for the ' Safe Driving Competition ' and 72 members' names have gone forward for an award.

Accidents.

During the year there have been 24 accident reports made to our Insurer through the City Treasurer's Department ; fortunately, these were all minor incidents, and the number of actual claims made was 8 involving a cost in respect of repairs to the Service's vehicles of approximately £253 0s. 0d.

Civil Defence.

Sectional Training of volunteers to the Ambulance Section for this ' Fourth Arm of Defence ' is the responsibility of the Local Health Authority Committee, and the work in this connection is now playing a large part in the daily life of the Service. The course of training as laid down by the Ministry of Health is of 60 hours' duration and in addition to this it is necessary to train personnel in driving, which adds another 20 hours.

During the year, 50 volunteers have been attending and 64 sessions have taken place, these usually being arranged on Monday and Wednesday evenings.

In September, the Service took part in an Exercise ' Seahorse '—arranged in conjunction with the Home Office Mobile Column and were able to turn out 20 vehicles and 34 volunteers. In addition to this, Northumberland County Council Civil Ambulance Section joined forces with us, and much experience was gained from the close liaison of the two Services.

Another responsibility the Local Health Authority have in this connection is that of training their own peacetime establishment in Civil Defence duties, and here it is regretted that due to normal commitments, it has not been possible to make much headway.

T A B L E I .
ANALYSIS OF WORK UNDERTAKEN BY THE AMBULANCE SERVICE DURING 1953.

Year	City.		Northumberland.		Durham.		Other Authorities		Co-ordinated Cases.	Ancillary Mileage.	Mid-wives' Service. Mileage.	Chargeable Mileage.	Civ. Def. Training Mileage.	Totals.		Working Hours.
	Cases.	Mileage.	Cases.	Mileage.	Cases.	Mileage.	Cases.	Mileage.						Cases.	Mileage.	
1953	114,566	466,831	1,607	30,183	6,525	108,347	2,788	51,949	9,373	21,693	17,456	37,157	2,567	125,486	736,183	215,793
1952	102,124	460,738	3,485	72,967	6,697	118,056	2,873	56,222	6,957	19,858	14,274	32,998	3,772	115,179	778,885	220,825
Difference	+12,442	+ 6,093	-1,878	-42,784	-172	-9,709	-85	-4,273	+ 2,416	+ 1,835	+ 3,182	+ 4,159	-1,205	+10,307	-42,702	-5,032

T A B L E II .
ANALYSIS OF CASES CONVEYED DURING 1953.

Year	Total No. of Patients Carried	ADMISSIONS				Out-patient Treatment Cases	Discharges	Mental Cases
		Emergency	Infectious	Maternity	Admissions			
1953	125,486	5,058	246	2,137	8,719	80,213	28,496	617
1952	115,179	5,032	312	1,923	8,520	69,239	29,614	539
Difference	+10,307	+26	-66	+214	+199	+10,974	-1,118	+78

HEALTH EDUCATION.

Exhibitions.

The department took part in three exhibitions during the year. The first of these was a Clean Food Exhibition which was staged in conjunction with a firm of refrigeration engineers, and which ran early in March for two weeks. A variety of modern refrigeration and food storage equipment was displayed, and our own exhibit consisted of bacteriological specimens showing colonies of growths from hands, boils, flies, dust, coughs and sneezes, etc. Suitable posters were displayed and appropriate leaflets distributed, the most popular being "The Customer's Health is in Your Hands." A small theatre was also in use in which the films "Another Case of Poisoning" and "Fly About the House" were shown as often as possible.

The second exhibition in which we participated was the Ideal Homes Exhibition which was held under canvas on the Town Moor from the 1st—15th August. On this occasion our exhibit dealt with the subject of accidents in the home. A stand was specially built to depict a living room, kitchenette and staircase, with an additional section for the display of posters and leaflets, and a few of the ways in which accidents can happen to children were demonstrated. The whole exhibition was very well attended and our own exhibit aroused considerable interest. Many questions were asked and over 15,000 leaflets were distributed.

Lastly, the department put on a small display at the Flower Show in Exhibition Park from the 20th—22nd August. Several photographs showing the work of the Health Department were displayed in an illuminated "Stillograph," and a large poster drawn in the form of a family tree showed the various activities of the department. In addition, sound films and film strips were shown periodically. This show was well set out but unfortunately the weather was extremely bad and this of course affected the attendances very considerably.

Film Shows and Talks.

As shown in the table below, many talks illustrated by films and film strips have been given at the clinics and to various organisations in the City, and, through having our own equipment, it has been possible to show several training films and film strips to students and professional staff. We have not been able to show as many films in the clinics as we would have liked, for two reasons, namely, the difficulty of blacking out and shortage of staff time for the operation of the projector. The equipment was put to very good use at the Flower Show, however, as mentioned above.

	No.	Total Attendance.	Average Attendance.
Film shows at Clinics	3	95	32
Films and film strips to Health Visitors, Nurses, Midwives, etc.	26	566	22
Film shows and talks to other organisations	18	568	32
Film strips and talks at Clinics	21	776	37
Film strips and talks to other organisations	8	225	28
Talks only	4	220	55
Totals	80	2,450	31

Other Publicity.

Display topics, posters and leaflets covering a variety of subjects have been obtained from the Central Council for Health Education, the Dental Board of the United Kingdom, and the Royal Society for the Prevention of Accidents, and have been displayed in the Welfare Centres, in certain shops, and on public notice boards throughout the City. The Health Visitors continue to make use of flannelgraphs and magnetic blackboards to illustrate their talks at the Clinics, together with films and film strips.

Advantage was taken of an opportunity to display picture sets in a shop window in one of the City's main thoroughfares during several different weeks, and it is hoped to secure this facility again during the coming year.

MATERNITY AND CHILD WELFARE ALMONER'S REPORT.

During the year 1,150 cases were referred to the Department for the usual type of help and advice. 26 per cent. were referred by their doctors, 34 per cent. by District Nurses, Health Visitors, Midwives and other Officers of the Local Authority. 26 per cent. came on their own accord, a few were cases carried over from last year, and 14 per cent. were referred by voluntary societies and other social workers. The number of names on the Register of Old People totalled 5,800 at the end of the year. Either a Health Visitor, District Nurse, Home Help or a visitor from one of the voluntary societies are in touch with these old people. Whenever some problem arises the Almoner is contacted. Through the summer months there were the usual requests for admission of old people and invalids to residential accommodation while their families who were caring for them went on holiday. These were dealt with but this is a growing and justifiable demand and obviously in the future it will not be possible to satisfy it with the facilities at present

existing. Apart from the normal voluntary services, the publicity given by the Old People's Welfare Advisory Committee has brought forth interesting offers of help. St. James's Congregational Social Guild offered to house clean and decorate for old people and did some very good work with difficult cases. A company of Rangers helped with old people's gardens during the summer months.

Invalid Loan Depot.

Increasing use has been made of this service by the General Practitioners, Home Nurses and Hospitals during the year.

LIST OF EQUIPMENT LENT.

Blankets	103	Feeding Cups	35
Sheets	222	Bed Cages	78
Draw Sheets	630	Invalid Chairs	102
Pillowcases	105	Dunlopillo Mattresses.....	67
Pillows	33	Towels	8
Back Rests.....	462	Bed Tables	17
Air Rings	431	Commodes	74
Bed Pans	471	Sorbo Rings	7
Rubber Bed Pans	14	Sorbo Squares	2
Male Urinals	253	Pulleys	14
Female Urinals	47	Spinal Carriages	2
Rubber Sheets	553	Cot Bed Mattresses.....	1
Bedsteads	75	Sandbags	7
Mattresses	72	Hot Water Bottles	14
Mattress Covers.....	68	Douche Can	1
Air Beds	19	Plastic Covers	59
Fracture Boards	3	Cot Blankets	2
Walk Aids	2	Adult Cots	1
Double Beam Apparatus	1	Flannellette Sheets	2

Convalescence.

The Local Health Authority has maintained 248 patients in convalescent homes. Of these, 56 were arranged by Hospital Almoners, Chest Clinic Almoners and Psychiatric Social Workers. Arrangements for convalescence for 259 patients were made by this Department; of these the Local Health Authority maintained 192. It was, as in previous years, difficult to arrange convalescence for mothers and babies.

282 patients were referred to this Department for arrangements for convalescence (233 by their doctors, 49 by Health Visitors, Midwives and Probation Officer, etc.). 23 patients were unable to go, but 259 were convalesced.

The table below shows the diagnosis of the adult patients :—

General and nervous debility and anæmia	99	Pneumonia and Pleurisy	10
Chest conditions	30	Gastric conditions	3
Neurosis	19	Hypertension	3
Rheumatic conditions	6	Post Natal	4
		Other diseases	22

Payment was arranged as follows :—

Local Health Authority (Patient assessed for contribution).....	192	Regional Hospital Board	25
Voluntary Funds and Free Homes	33	Patient paying full cost	9

Analysis of Work.

Total number of interviews 1522

New Applicants..... 1150

Visits..... 589

Assistance arranged—

Convalescence	259
Clothing	108
Permanent bedding, cots and prams	106
Financial help	51
Arrangements for care of children	97
Referred to Domestic Help Dept. Visitor.....	58
Advice on Domestic problems and miscellaneous minor services	40
Admission to home or hospital, hospital or medical treatment	804
District Nurse	93
Radios for housebound	38
Accommodation found	5
Care of unmarried mothers....	4
Employment found	2
Permanent Invalid Chairs	8
Meals on Wheels	3
Escorts, Sitters-in, Night Sitters-in	15
Night Nurse	18
Chiropody	1
Transport	8
Extra nourishment	8
Special School	3
House-cleaning	2
Gardening	6
Rehabilitation	2
	1

Agencies to which patients were referred.

Statutory—

National Assistance Board	91
Ministry of Labour	9

City Departments—

Health Dept. (for convalescence)	192
Day Nursery	41
Home Help	58
Children's Officer	27
Director of Education	8
Mental Deficiency Officer.....	2
Social Welfare Department ...	11
Chief Sanitary Inspector	1

Voluntary—

Newcastle Council of Social Service and Old People's Welfare Committee.....	10
Women's Voluntary Service ..	108
Moral Welfare Workers	13
Hospital Almoners	29
Poor Children's Holiday Association	20
Rotary Club.....	3
Soldiers', Sailors' and Airmen's Families Association.....	35
Newcastle Housing Improvement Trust.....	7
British Red Cross Society	22
Blind Voluntary Society	2
British Legion, Royal Naval Benevolent Fund, Post Office Benevolent Fund, Vickers-Armstrong Benevolent Fund	16
John Hunter Routledge Memorial Fund	6
National Society for Cancer Relief	1
Local Clergy	5
St. James' Congregational Social Guild	6
Miscellaneous	24

The help and co-operation of the Voluntary and Statutory Bodies have been much appreciated.

DOMESTIC HELP.

The Domestic Help Scheme under the National Health Service Acts (now an established service throughout the country) is playing a very important part in this City. Throughout the years an ever-increasing demand in respect of the aged has been growing rapidly. Many cases of neglect have been caused through the refusal of an old person to take advantage of the Home Help Service, and one of the drawbacks in dealing with the elderly is their dislike of strangers in their homes. The Home Helps undertake to do all household duties and by their attendance many old people, especially those living alone, are enabled to remain in their own homes. Without such a service many more hospital and institution beds would have to be found. Old people look forward to the visit of the Home Help, she is regarded (once they have got used to her) as a friend and is often almost the sole contact from outside the homes, and she supplies pieces of news which are interesting to housebound old people. One of life's tragedies would appear to be that spare time only seems to occur in extreme youth and old age and therefore cannot be fully utilised.

The maternity cases are for the most part happy cases. The atmosphere is entirely different from that of a home where there is illness.

As the figures show, the time of the Home Helps is mostly expended on the aged and "long-term" sick, comparatively few being absorbed by short-term illness. Probably in most of these latter cases the other members of the household or other relatives can cope for the short period necessary. The tuberculous households create a certain amount of difficulty. It is not always easy to get women who are willing to work at this type of case, and it is not advisable to send young women or those with young children into these homes. An attempt is made to keep an adequate nucleus of suitable women who are willing to undertake this work, and every precaution is taken to safeguard them in the way of instruction as to hygiene and with tuberculin testing beforehand.

On the 1st January, 1953, the scheme for the City was divided into three sections, i.e., East, West and Central. These areas are run by three Assistant Organisers. The Service was growing too large for the Organiser to give individual attention to each case and to the Home Helps. Decentralisation is the best solution in dealing with the very heavy demand on the service.

Home Helps employed at the end of 1953 were: full-time 51, part-time 288. 1,887 cases were assisted, and 4,409 visits were paid to the homes of the patients.

Just before the end of the year a training scheme was established for Home Helps already on the staff, in co-operation with the Education Committee and the Director of Education and his staff. A fully equipped flat, in one of the most up-to-date modern girls' schools, was made available for Home Helps evening classes, and arrangements were made for the practical classes to be given by one of the Local Education Authority's domestic science teachers. The course arranged consists of six evening sessions on practical cookery and housewifery, and six lectures given by the Health Department medical and nursing staff on hygiene, common infections, home nursing, prevention of home accidents, the care of infants and old people and a general review of the Public Health Services with particular reference to the place of the Home Help. The Home Helps appear to enjoy the course, both the educational and the social side of it, and the group teaching has given an opportunity for expression and exchange of views and problems among the workers themselves and between them and the administrative staff.

CASES ATTENDED DURING 1953.

Maternity	459
Short-term illness	187
Long-term illness (under 65 years)	336
Child Care	21
Aged Sick (over 65 years)	884
	<hr/>
	1,887
	<hr/>

This total includes cases of tuberculosis, cancer, heart and chest disease.

MENTAL HEALTH SERVICES.

I.—Administration.

As there have been no appreciable changes in the arrangements for the administration of the City's Mental Health Service outlined in the Annual Report for last year and previous years, it is only necessary to draw attention to a few points.

(a) CONSTITUTION OF THE HEALTH SUB-COMMITTEE.

This sub-committee is increased to 8 members of the Health Committee and an experienced social worker is a co-opted member. Increasing time is given to matters concerning the occupation centres.

(c) CO-ORDINATION WITH THE REGIONAL HOSPITAL BOARD AND HOSPITAL MANAGEMENT COMMITTEES.

The close liaison between the authorised officers and the staff of St. Nicholas Hospital for the care and domiciliary supervision of mental patients due for discharge is extended by the co-operation between the clinical consultant and the Chief Nursing Officer to enable the health visitors to assist in domiciliary after-care visiting, where needed.

Reference to the effects of the serious shortage of hospital beds for cases of mental disorder and mental deficiency and the special problem created by cases of senile dementia is discussed in Part II of this report, and whilst the Regional Hospital Board is fully aware of the urgency of the need for such beds, this Authority has felt it necessary to keep pressing for the maximum resolution of this problem.

(e) ARRANGEMENTS FOR THE TRAINING OF MENTAL HEALTH WORKERS.

The Supervisor of the Occupation Centre attended a one-week refresher course at Birmingham run by the National Association for Mental Health. A six weeks' period of training directed primarily to mental deficiency was given to a student preparing for an honours degree.

II.—Account of Work undertaken in the Community.

(a) UNDER SECTION 28, NATIONAL HEALTH SERVICE ACT, 1946.—
PREVENTION, CARE AND AFTER-CARE.

Many cases are referred to the duly authorised officers of the City by general practitioners as well as by the police, magistrates' courts, probation officers, the social services and the National Assistance Board, and not least by the local authority's domiciliary services. The close relationship between general practitioners and the duly authorised officers is one of the main factors in prevention, and tribute has been paid to the ready assistance and advice of these officers by the Local Medical Committee. In the case of early mental disorder the duly authorised officer helps preventively by arranging attendance at the specialist clinics by booked appointments or by persuading

patients to accept hospital treatment or in some cases to be seen at home by a psychiatrist, which assists the prompt and suitable disposal of cases.

The follow-up of mental cases discharged from the hospital in conjunction with the hospital staffs and psychiatric social workers is of great importance both to the patient and the family who need to understand the part they have to play, and in saving beds (already too few) by the reduced relapse rate. This home visiting enables the duly authorised officers to provide social histories and home reports on the home conditions for the guidance of the psychiatrist in his assessment of progress.

It is customary for an officer from the lunacy section to accompany voluntary patients to hospital where there are no relatives or where they ask for assistance. Indeed, the Mental Health staff do advise and help anyone (including private cases) as far as reasonable within the orbit of their work, which includes at times taking an interest in the placement in suitable work.

The difficulty in obtaining hospital accommodation must be emphasised again, though a national problem, for the presence of considerable waiting lists seriously affects care and after-care as well as militating against the preventive value which immediate hospital treatment can give.

The lack of beds causes much worry and frustration, in particular to the duly authorised officers discharging their duties under the Lunacy Acts (as well as considerable extra visiting often at night from the first reporting of the case (some have been attempted suicides) until its admission to hospital, this period having been in many cases as long as three months). Such visits would well constitute "before care" rather than "after care." There is now a permanent waiting list which seldom falls below 20, for cases which should be in hospital; and it is quite clear that this supervision of such patients is time consuming, apart from adding to the difficulty and anxiety of the work of the officers.

The problem of obtaining hospital accommodation applies no less for mental defectives even for difficult, urgent and court cases, as shown by the waiting list which at the end of the year was 75 (41 males) compared with 67, 79 and 69 for 1952-1950, whilst admissions to hospital in 1953 were 32 compared with 26, and 45 in 1952 and 1951 respectively. The principle of admitting from a waiting list has

unfortunately too often to be waived for an urgent case (sometimes unknown) suddenly occurring as on the death of a last surviving relative. Some waiting cases may as a result have to be placed under the care of the Children's Officer which causes difficulties in supervision, etc. The shortage of hospital places also has prevented the magistrates in cases in 1953 from exercising their powers under Sect. 8 of the Mental Deficiency Act. It also results in the occupation centres taking lower grade children than they would otherwise do, and impeding the flow from the Special Schools for educationally subnormal children. A waiting list for hospital for mental defectives means a delay for a group which is vulnerable to delay, apart from the serious and at times disruptive effect on the family.

The problem of the aged person with mental disorder is also a difficult one, and must be stressed once more. It is not always easy or appropriate to provide domiciliary help and where neighbourly help is not adequate either, the Duly Authorised Officer tends to send such cases into the Psychiatric Unit of the Newcastle General Hospital, where often a few days care and attention enables improvement, sufficient to allow the case to return home to an environment in which the causal factors tend to operate towards a recurrence of the mental disturbance. This, however, congests the Unit and delays admission of younger and generally more treatable patients.

It is realised that the Geriatric and Welfare departments have their accommodation difficulties also, but the admission of many old people to these departments in the early stages of their "failing" should be possible. It is often felt that some "half way house" between these departments would be of great value.

The lack of adequate provision is an ever increasing source of worry and also, as in other cases, the only means of providing care is by admission to a Mental Hospital by certification under the Lunacy Acts, a procedure which can only be viewed with concern.

The general work of ascertainment, visiting, advising and supervising, etc., the mental defective in the home with the elimination of unsatisfactory features where possible in the environment is preventive as far as this type of work permits, whilst care and after-care is effected largely by the visiting of cases as far as possible according to the need, and by the help given by the mental cases sub-committee in certain instances. It is often found, however, that through the Courts, Police, Probation Services and the various voluntary bodies, cases come to light which were not ascertained in their earlier years.

Such belated ascertainment does not allow of the continuous supervision which is necessary if the social workers' efforts are to have their full effect and value.

It is hoped that the increased attention being given to ascertainment may reduce the number of cases of defectives who appear at Court before the Newcastle magistrates on various charges. Particulars of attendances and disposal are given in the following table.

Year.	Cases.			Orders made by the Courts.			Attendance at Court by "Mental Deficiency Officer."
	Male.	Female.	Total.	Male.	Female.	Total.	
1949.....	3	1	4	3	1	4	6
1950.....	12	5	17	4	1	5	17
1951.....	13	1	14	2	—	2	14
1952.....	3	5	8	1	—	1	8
1953.....	10	3	13	1	—	1	22

Of the 13 cases dealt with during 1953 the disposal was :—

Males.— 1 juvenile Section 8 of the " M.D." Act, 1913.

1 ,, not dealt with by end of 1953.

2 cases sent to prison.

4 ,, Petition.

1 case (divorcee) ... concerning maintenance of child.

1 ,, not proved a mental deficient.

Females.—4 cases petition.

1 case no action.

Temporary hospital accommodation was arranged in mental deficiency hospitals under the terms of Circular 5/52 for 10 males and 13 females each for two weeks compared with 6 males and 11 females last year. 4 males were placed in hospital as an emergency measure prior to presentation of petitions to obtain permanent accommodation.

The Mental Health staff have been very well served by the City's Ambulance Service which has given additional assistance this year, and they wish to record their appreciation for the ever prompt response given by the Ambulance Officer and his staff to the needs of a service which operates over 24 hours.

(b) UNDER THE LUNACY AND MENTAL TREATMENT ACTS, 1890-1930,
BY DULY AUTHORISED OFFICERS/MENTAL HEALTH STAFF :

The following table shows the category of cases received into hospital :—

ANALYSIS OF THE 639 ADMISSIONS TO MENTAL HOSPITAL OR CLINIC.

	Psychiatric Unit.		St. Nicholas Hospital.		Other Hospitals.		Totals.	
	1953	1952	1953	1952	1953	1952	1953	1952
Under Section 20— By duly authorised officers.....	293	337	62	58	9	15	364	410
Under Section 21— On Magistrate's Order.....	1	—	—	1	—	—	1	1
Certified at home before admission .	—	—	124	118	—	2	124	120
Under Criminal Justice Act, 1948— Certified	—	—	4	4	1	—	5	4
Voluntary	—	—	—	2	—	—	—	2
Voluntary Cases ...	—	—	144	140	—	—	144	140
Temporary Cases...	—	—	1	—	—	—	1	—
Totals	294	337	335	323	10	17	639	677

The annual hospital admissions were 819, 703, 677 to 639 in the years 1950-1953 respectively, which shows a steady fall. Cases dealt with by the duly authorised officers under order for the same years respectively, are 566, 434, 411 and 365 which also shows a reduction. The increase of domiciliary certification before admission is seen from the figures for the same years, namely, 14, 99, 118 and 124.

SUMMARY OF DISPOSAL OF HOSPITAL CASES IN 1953.

	Psychiatric Unit.		St. Nicholas Hospital.		Other Hospitals.		Totals.	
	1953	1952	1953	1952	1953	1952	1953	1952
To Mental Hospitals—								
(a) Certified cases removed	34	50	11	16	27	10	72	76
(b) Transfers from Section 20 to Voluntary Class	3	1	40	32	3	1	46	34
(c) Transfers from Section 20 to Temporary Class	—	1	—	—	—	—	—	1
Totals	37	52	51	48	30	11	118	111

	<i>Totals.</i>	
Home or otherwise—	1953	1952
(a) Home from Psychiatric Unit	73	126
Home from St. Nicholas Hospital	10	4
(b) Died in Psychiatric Unit	7	17
(c) Discharges from Section 20 to General Wards, etc.—		
Newcastle General Hospital	166	126
(d) Discharges from St. Nicholas Hospital	273	253
(e) Deaths in St. Nicholas Hospital	105	104
Totals	<u>634</u>	<u>635</u>

It will be observed that fewer cases were discharged home and that by roughly the same amount there were increased discharges to general hospital wards.

(c) UNDER THE MENTAL DEFICIENCY ACTS, 1913-1938 :—

(i) Ascertainment, including the number of defectives awaiting vacancies in institutions at the end of the year.

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>	
	1953	1952	1953	1952	1953	1952
Cases awaiting vacancies in institutions	46	41	34	34	80	75
Cases removed to hospital	15	17	17	9	32	26
Cases ascertained	36	26	19	33	55	59
Cases reported	44	35	26	40	70*	75
Percentage of ascertained to reported cases					78·6	75·3

* Five cases were not found to be mentally deficient and ten not confirmed as such.

SOURCES OF CASES REPORTED TO THE MENTAL DEFICIENCY SECTION
IN 1953.

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>	
	1953	1952	1953	1952	1953	1952
Education Department	25	19	13	18	38	37
Hospitals	—	3	—	3	—	6
Miscellaneous Sources	11	2	7	8	18	10
Health Department	4	2	2	1	6	3
Courts	2	3	1	5	3	8
Probation Service.....	2	2	1	1	3	3
General Practitioners.....	—	1	2	2	2	3
Totals	<u>44</u>	<u>35</u>	<u>26</u>	<u>40</u>	<u>70</u>	<u>75</u>

DISPOSAL OF CASES BY THE MENTAL DEFICIENCY SECTION IN 1953.

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>	
	1953	1952	1953	1952	1953	1952
To hospitals	6	8	2	2	8	10
Placed under statutory supervision	29	13	17	23	46	36
Placed under voluntary supervision	3	—	—	3	3	3
Lunacy Act	1	—	—	1	1	1
Died or removed	—	1	1	2	1	3
Not defective	—	2	1	4	1	6
In place of safety	1	6	—	—	1	6
Action deferred.....	5	5	4	5	9	10
Totals	<u>45</u>	<u>35</u>	<u>25</u>	<u>40</u>	<u>70</u>	<u>75</u>

(ii) Guardianship and Supervision.

The staff of the Mental Deficiency Section visit established cases, being assisted this year by the staff of the Lunacy Section, particularly because of sickness absence which reduced overall visiting. All new cases reported to the section are visited by the Mental Deficiency Officer to establish friendly relations with the defective and his family from the outset. A case history and a report on the home conditions is obtained and a medical report provided for consideration by the mental cases Sub-committee as to the ultimate disposal of a case. Reference numbers and not names and addresses are given on the agenda to prevent identification beyond the Committee.

The Mental Deficiency Officer also carries out administrative duties working directly under the Medical Officer of Health and co-operates with general practitioners, hospital staffs, clinics, Courts, probation officers, etc., apart from taking a keen interest in talks on mental deficiency to public groups throughout the year. He is, with his assistant mental health worker, authorised to present petitions and to take a person to a place of safety where necessary.

PARTICULARS OF VISITING AND REPORTING ON DEFECTIVES UNDER
LOCAL AUTHORITY SUPERVISION.

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>	
	1953	1952	1953	1952	1953	1952
Total cases under—						
Statutory Supervision	216	187	210	208	426	395
Voluntary Supervision	6	2	4	4	10	6
Guardianship	3	3	3	3	6	6
No. of Statutory Visits paid	160	477	525	830	685	1,307
Home and progress reports to hos- pitals	112	98	54	80	196	178
No. of petitions presented	13	11	17	6	30	17
City Cases—						
In mental deficiency hospitals	313	309	237	227	520	538
In places of safety	1	—	1	—	1	—

No defectives were changed in 1953 or 1952 from :—

- (a) Guardianship to supervision.
- (b) Statutory supervision to guardianship.
- (c) Institution care to guardianship.

In 1953 no case under Guardianship was admitted to an Institution (there was one such case in 1952).

(iii) Occupation and Training.

Arrangements for carrying out the statutory duty to thus provide for defectives in the City is as follows :—

(a) Occupation Centres.

The site and buildings in Jubilee Road which were formerly those of the Princess Mary Maternity Hospital are being altered for use as an occupation centre as early as possible in 1954, whilst it is hoped to be able to implement the proposal that an adult male occupation centre should be provided next year also.

The full time well equipped occupation centre opened on the 7th August, 1952, in a prefabricated building in Byker Park, previously used as a day nursery, is open five days a week and is under the charge of an experienced qualified supervisor who is helped by two assistants, two cleaners and a part time cook. The numbers of children of varying grade in attendance is at present 14 boys and 11 girls for whom ambulance transport to their homes is supplied with the staff as escorts which is valuable in allowing daily contact with the parents proportional to the need. A mid-day meal cooked on the premises is provided. The scope of training is gradually being extended and includes part time training on one day for adult female defectives. A Parents' Association for those whose children or adult daughters attend the centre has been formed and meets at intervals. The meetings have been successful, varying from a discussion and talk, with a film on some useful health subject, to a social meeting. Such meetings are felt to be of great value, enabling an extra opportunity for parents to meet the centre and administrative staff as well as to meet each other when they find their problems are shared by other out-patients' parents.

(b) Adult Girls' Club.

Thirteen girls under statutory supervision attend and the mental health worker of the mental deficiency section who began this club in October, 1950, continues to be in charge. It meets weekly in the evening after their handicraft class is over at the occupation centre.

III.—Out-patients' Clinics.

(a) St. Thomas' Psychiatric Clinic : This clinic serves St. Nicholas Hospital, Gosforth ; St. George's Hospital, Morpeth ; and St. Mary's Hospital, Stannington, from a building provided by the Regional Hospital Board, and serves as an extension into the City of hospital departments.

The source of the 446 City patients attending is as follows :—

	1953	1952.
*Own doctor	292	361
Probation Officer	41	58
School Health Service	40	44
Ex-hospital in-patients follow-up	47	42
Ministry of Labour	5	17
Duly Authorised Officers	18	12
Ministry of Pensions	3	2
Marriage Guidance Council.....	—	1

Second and further attendances of patients totalled 1,342.

* The Authorised Officers have been associated with many cases referred by doctors.

(b) Special Mental Deficiency Clinic, Wharnccliffe Street Centre.

<i>Source of persons referred.</i>	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>	
	1953	1952	1953	1952	1953	1952
Newcastle Mental Deficiency Section	20	15	10	7	30	22
Northumberland Health Authority.	4	6	4	4	8	10
Consultant in mental deficiency....	2	—	1	1	3	1
General Practitioners.....	—	—	2	—	2	—
Probation Service.....	—	1	1	1	1	2
City Education Department.....	—	5	—	1	—	6
	—	—	—	—	—	—
Totals	26	27	18	14	44	41
	—	—	—	—	—	—

NATIONAL ASSISTANCE ACT, 1948

and

NATIONAL ASSISTANCE (AMENDMENT) ACT, 1951.

Removal to suitable premises of persons in need of care and attention.

Whilst several visits were made in connection with the above, it was only necessary to take action under Section 47 in two instances. The first of these was an old lady aged 73, living in very insanitary conditions in one room and suffering from gross malnutrition. She was quite incapable of looking after herself but refused to go voluntarily into an institution. Application was therefore made for her removal to Elswick Grange, and she elected to remain in the institution at the end of the year.

The second case dealt with was an old lady aged 83 years, who was stone deaf, living in insanitary conditions, who was being looked after by her mentally defective son. She refused all attempts to persuade her to go into an institution, and an order was obtained for her removal for a period of three weeks. At the end of the year this period had not expired.

INCIDENCE OF BLINDNESS.

At the end of the year there were 801 persons in the City registered as blind, and 130 registered as partially sighted. Of the latter, 32 are likely to become blind during the next 4 years. 50 per cent. of the blind and 30 per cent. of the partially sighted are over 65 years of age.

During the year a total of 148 forms B.D.8 were received, resulting in the registration of 76 blind persons and 30 partially sighted. Amongst the former were 3 babies and 1 school child, whilst the latter included 1 infant and 4 school children.

The following table shows the cause of disability and recommendations in respect of persons registered during the year.

FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS.

(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D. 8 recommends :—	CAUSE OF DISABILITY.							
	Cataract.		Glaucoma.		Retrolental Fibroplasia.		Others.	
	Blind.	Partially Sighted.	Blind.	Partially Sighted.	Blind.	Partially Sighted.	Blind.	Partially Sighted.
(a) No treatment ...	8	4	3	Nil	Nil	Nil	27	8
(b) Treatment—								
Medical	Nil	Nil	4	3	Nil	Nil	9	Nil
Surgical.....	16	4	3	1	Nil	Nil	3	3
Optical	Nil	Nil	Nil	1	Nil	Nil	Nil	1
Educational ...	Nil	Nil	Nil	Nil	1	Nil	2	2
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment ..	7	1	6	4	Nil	Nil	11	4

OPHTHALMIA NEONATORUM.

- (i) Total number of cases notified during the year 2
- (ii) Number of cases in which :—
- (a) Vision lost Nil
- (b) Vision impaired 2
- (c) Treatment continuing at end of year 1

PREVALENCE, PREVENTION AND CONTROL.

III—INFECTIOUS DISEASE

**FEVERS, FOOD POISONING
DISINFECTION, etc.**

THE PREVALENCE AND CONTROL OF INFECTIOUS DISEASE.

There were 7,294 (13,188)* notified cases of infectious disease in 1953 (compared with a total of 9,741 in 1951). Table A shows incidence of infectious disease and deaths by age groups, and Table B the ward incidence including deaths from pneumonia, diarrhoea under 2 years and all forms of tuberculosis. Both tables compare totals by diagnosis and ward distribution for 1953 and 1952.

It is gratifying to record no deaths from diphtheria, only 1 from whooping cough and 2 from measles in 1953, whilst for non-notifiable diarrhoea from gastro enteritis there were only 12 deaths, compared with 21, 17, 17 in 1952-50 respectively, giving a death rate per 1,000 of the population of 0·04 (0·07).

The routine visiting of cases of notifiable infectious disease (and non-notifiable if necessary on request) is carried out almost entirely by Health Visitors and special sanitary inspectors, which enables a brief topical mention in the home as to causation, infectivity, prevention, disinfection, etc., as well as any guidance in the care of the patient, since personal action is so important in the reduction of infectious disease. Health Visitors visit up to recovery all notified cases of whooping cough, measles, pneumonia, poliomyelitis and rubella, whilst cases of puerperal fever, ophthalmia neonatorum and pemphigus are similarly visited by the non-medical Supervisor of Midwives or her deputy when advice as to the nursing and isolation of the patient and the supervision of the case is especially valuable in the few cases where a doctor is not also in attendance.

The following cases came under supervision of the Health Department: One contact of meningitis, 7 of scarlet fever, 2 of dysentery, 6 of paratyphoid "B" and 2 of food poisoning. One contact of paratyphoid "B" and 2 of food poisoning developed these diseases. No schools were closed in 1953 because of infectious disease.

Chicken Pox.—2,514 (2,796) cases were notified with 60 (76) primary cases in adults. There was one death, a boy of 15 years. A brief peak of incidence, sharply rising to 132 cases early in January fell away to a third of this, rising to a similar peak mainly in July over 5 weeks.

Diphtheria.—No cases (1) occurred during 1953. Immunisation is referred to on page 54 under Section 26 of the National Health Service Act.

Dysentery.—117 (44) confirmed cases were notified, 115 being Sonne type and 2 Flexner type. There were no deaths. Incidence from 1945-1953 was 350, 173, 14, 35, 118, 364, 244 and 44 respectively. A low weekly incidence was noted throughout the year with a slight increase from mid May to July and again in September—October for several weeks.

The surveillance of home nursed cases and carriers until considered free from infection revealed (from bacteriological examination) 5 persons engaged in the handling of food to be non-contact carriers. Each case ceased employment voluntarily until considered free from infection. There was a small incidence of 26 cases of dysentery in the Municipal Nurseries (compared with 9 cases in 1952 and 93 in 1951), which is shown below :—

Gosforth Street ..	6 cases.	34 carriers.
St. Anthony's ...	4 ,,	15 ,,
Cresta	2 ,,	10 ,,
Renwick St.	8 ,,	9 ,,
West Parade	3 ,,	9 ,,
Woodlands	1 case.	7 ,,

The Armstrong Road Residential Nursery had 2 cases and no carriers.

* Figures in parenthesis refer to 1952.

Enteric.—Of 10 (5) confirmed cases scattered evenly between April and December, all shown to be paratyphoid “B”, 6 were admitted to hospital. Immediate contacts were subject to bacteriological tests and surveillance, which revealed 2 boys in one family to be carriers with no history of symptoms and no further cases developed.

Erysipelas.—36 (33) notified cases occurred evenly over the year.

Encephalitis.—Of 5 cases notified, 1, a child of 21 months, died.

Food Poisoning.—44 (10) cases were notified. The types of 32 cases of Salmonella were : S.typhi murium 26, S. Thompson and S. Dublin 1 each, S. Enteritidis 2, not typed 2. 6 cases due to a heat resistant strain of Cl. Welchii were notified from military barracks in the City. On investigation a number of carriers were found and others admitting

to only the mildest of symptoms on questioning. The presumed origin was one cookhouse where 4 cooks were found to be excreting the organism which was also found in a heated stew served the previous day.

2 cases in one household were due to *staphylococcus aureus*, a profuse growth of which was found on ox tongue purchased from a retail store where it had been on display on the service counter unprotected from customers. The store management adopted suggestions made as to prevention of contamination of food on display. 3 cases in one household were suspected to have been due to eating a "bath chap" (pig's cheek) which had been kept days in the house before being eaten.

From the routine investigation of notified cases, 3 carriers of *Salmonella* organisms were found. No action was required to be taken under Circular 115/48. Almost all cases of food poisoning notified occurred evenly from June, ending with a small jump at the end of September.

Measles and Rubella.—There were 2,747 (4,051) cases of measles, with 2 deaths, and 284 (4,006) of rubella notified during the year. Health Visitors visited 99·13 per cent. of notified cases of measles, further cases in a family being notified by them. 2,583 or 94·82 per cent. of notified cases of measles ran a normal course. The second incidence of measles in 1952 reached a peak of 200 notified cases in the second week of January, 1953, then mainly ranging between 120 and 150 cases until early April, when a steady fall began to a few cases weekly by August. There was for the first 3 months a weekly incidence of never less than 100 cases of measles. The notified cases of rubella were evenly spread over 1953.

Malaria.—3 cases recurring and contracted abroad were notified.

Meningococcal Infection.—12 (10) cases were notified, with a death in a child of eight months old.

Ophthalmia Neonatorum.—2 (4) cases reported were visited and recovered.

Pneumonia, including Influenzal Pneumonia.—348 (317) notifications of pneumonia included 27 (7) of influenzal pneumonia. Health Visitors visited 343 (276) cases. Incidence was spread fairly evenly over the year but with about 20 cases in February and rather less throughout December.

Poliomyelitis, Polioencephalitis.—There were only 6 (53) cases (with happily no deaths) confirmed, 3 being paralytic ; 5 cases went to hospital.

Puerperal Pyrexia.—Of 127 (120) cases reported 115 (100) occurred in hospital and 3 (3) were admitted to hospital from home.

Scarlet Fever.—Of 316 (446) confirmed cases, all were mild, and this infection is now almost entirely nursed at home. There were 276 single cases and 20 households in which 2 cases occurred. The attack rate per 1,000 of the population was 1·1 (1·5).

Whooping Cough.—There were 723 (1,289) notifications and 1 (1) death. This disease chiefly affects the young child. (There were 501 (243) cases under 5, and 206 (327) between 5 and 15 years). The quarterly totals were 182, 227, 221 and 93, and there was a general spread of incidence throughout the year.

TABLE A.

CONFIRMED CASES OF NOTIFIABLE INFECTIOUS DISEASE AND DEATHS.
EXCLUSIVE OF TUBERCULOSIS.

AGES OF CASES OF INFECTIOUS DISEASE NOTIFIED AND DEATHS REGISTERED DURING THE YEAR 1953.

NOTIFIABLE DISEASE.	AT AGES—YEARS.														NET TOTAL.					
	Under 1.		1 and under 5.		5 and under 15.		15 and under 25.		25 and under 45.		45 and under 65.		65 and up- wards.		Ages not known.		1953.		1952.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Diphtheria . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Erysipelas . . . . .	..	..	104	..	196	..	11	..	3	..	2	..	..	..	316	..	33	..	446	..
Scarlet Fever . . . . .	..	..	2	..	4	..	1	..	2	..	..	..	..	..	10	..	5	..	5	..
Enteric Fever	1	..	6	..	..	..	..	..	1	..	..	..	..	..	12	1	10	..	10	2
Meningococcal Infections	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute Poliomyelitis and Acute Polioencephalitis . . . . .	..	..	2	..	2	..	..	..	2	..	..	..	..	..	6	..	53	..	53	2
Encephalitis Lethargica . . . . .	..	1	3	..	1	..	..	..	75	..	1	..	..	..	5	3	..	..	..	2
Puerperal Pyrexia . . . . .	..	..	..	..	..	..	52	..	..	..	..	..	..	..	127	..	120	..	120	..
Ophthalmia Neonatorum	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	4	..	4	..
Pneumonia	20	10	45	2	49	..	27	1	53	7	82	28	67	92	348	140	317	154	317	154
Malaria . . . . .	..	..	..	..	1	..	1	..	..	..	1	..	..	..	3	..	3	..	3	..
Dysentery	8	..	56	..	32	..	9	..	10	..	1	..	..	..	117	..	44	..	44	1
Measles and Rubella	193	..	1886	1	904	1	19	..	5	..	5	..	2	..	3031	2	8057	1	8057	1
Chickenpox	69	..	711	..	1674	..	27	1	32	..	1	..	..	..	2514	1	2796	..	2796	..
Whooping Cough	71	..	432	1	206	..	5	..	4	..	2	..	..	..	723	1	1289	..	1289	1
Food Poisoning	1	..	6	..	8	..	10	..	5	..	11	..	3	..	44	..	10	..	10	1
Totals	370	12	3253	5	3077	1	163	3	198	7	127	28	83	92	7294	148	13188	162	13188	162

TABLE B.
WARD DISTRIBUTION OF INFECTIOUS DISEASES (NET).
(SHOWING DEATHS FROM PNEUMONIA, DIARRHOEA AND TUBERCULOSIS.)

WARD.	Diphtheria.	Erysipelas.	Enteric Fever.	Encephalitis Lethargica.	Food Poisoning	Scarlet Fever.	Meningococcal Infections.	Polio-myelitis.	Malaria	Measles.	Rubella.	Puerperal Pyrexia.	Ophthalmia Neonatorum.	Acute Primary Pneumonia.	Acute Influenzal Pneumonia.	Chickenpox.	Dysentery.	Whooping Cough.	Tuberculosis (all forms).	Total 1953	Total 1952	DEATHS.		
																						Pneu- monia	Diarr- hoea under 2 yrs.	Tuber- culosis all forms.
St. Nicholas	1	..	1	2	6	..	..	..	87	5	3	..	8	..	107	7	8	18	253	305	6	..	4
Kenton	6	2	..	5	58	1	1	..	292	45	11	1	34	5	351	12	139	32	995	1265	7	..	3
Scotswood	3	..	..	2	17	1	..	..	121	23	8	..	28	5	112	10	30	23	383	1145	9	..	8
Stephenson	4	..	1	4	23	1	..	..	183	12	8	..	17	1	100	17	59	49	479	1023	17	3	10
Armstrong	1	..	..	1	14	3	1	1	173	4	9	..	15	..	79	7	47	32	387	972	15	1	6
Elswick	2	..	..	14	..	1	..	113	13	2	..	14	..	100	6	42	30	337	801	7	..	6
Westgate	1	1	..	7	17	..	..	1	88	13	12	..	13	..	168	..	20	33	374	661	10	..	4
Arthur's Hill	17	1	..	..	72	14	12	1	15	..	184	1	35	30	382	977	10	..	4
Benwell	1	..	2	..	9	..	..	..	127	8	10	..	29	..	133	8	28	34	389	1006	8	..	3
Fenham	5	..	..	4	30	..	1	..	147	15	7	..	17	..	130	2	46	19	423	889	4	..	2
Sandyford.....	..	1	1	..	1	13	..	..	1	139	6	3	..	9	..	137	6	14	25	356	476	2	..	2
Jesmond	1	..	..	4	9	..	1	..	80	17	2	..	13	3	108	..	17	16	271	495	3	..	5
Dene	1	..	..	2	15	1	..	..	126	15	3	..	11	1	132	2	42	20	371	629	2	..	3
Heaton	5	..	..	1	8	..	..	..	159	12	4	..	14	3	105	1	31	21	364	393	7	..	3
Byker	3	..	..	6	..	..	..	181	4	5	..	18	3	90	6	26	29	371	471	8	..	4
St. Lawrence	3	..	..	5	10	2	1	..	110	12	7	..	17	..	156	5	36	38	402	490	3	..	4
St. Anthony's	1	..	..	3	3	2	..	..	91	11	7	..	13	2	86	5	23	27	274	500	12	..	5
Walker	1	..	28	..	..	..	320	20	11	..	15	1	86	15	37	47	581	621	5	..	13
Walkergate	2	1	..	3	19	..	..	..	138	35	3	..	21	3	150	7	43	21	446	563	5	..	4
Total 1953..	..	36	10	5	44	316	12	6	3	2747	284	127	2	321	27	2514	117	723	544	7838	..	140	4	93
Total 1952 ..	1	33	5	..	10	446	10	53	3	4051	4006	120	4	310	7	2796	44	1289	494	..	13682	153	8	107

SPECIAL SKIN CLINIC.

(Figures in parenthesis refer to 1952).

Of total attendances 14·11 (25·2) and 85·44 (69·0) per cent. were for scabies and pediculosis respectively. The number of treatments still falls, due to the increasing proportion of pediculosis cases which usually need only one treatment. Those attending comprised 639 males and 48 females, or 93 (81) and 7 (19) per cent. respectively, with an age distribution of :—

0-1 years	2 (1)
1-5 years	17 (51)
5-15 years	21 (74)
15 years and over	647 (596)

The 236 or 34 (30) per cent. of persons referred by the Health Department were all (except for 4 cases of scabies) pediculosis cases, mostly from the two common lodging houses, and this total exceeded by 40 the total of 194 or 28·3 per cent. from the Salvation Army and Prudhoe Street Mission. Of the 12·2 (16·1) per cent. from the Newcastle General Hospital, ten-elevenths were cases of pediculosis, whilst of the 19·1 (15·6) per cent. of cases self referred, almost half came with scabies. Of the 31 cases or 4·5 (7) per cent. from 15 (50) doctors, two-thirds were cases of scabies. The National Assistance Board referred 6 cases, the School Health Service 3 cases, and the Welfare Department 1 case.

There were 3 (42) other conditions, 2 being flea infestations and 1 for special baths. There were no cases (14) referred from other authorities and no (2) double infestations of scabies and pediculosis. There were 2 cases referred back to their own doctors.

The following tables show (a) cases dealt with and treatments given over recent years and (b) the sex and age distribution of scabies and pediculosis cases treated in 1953.

I can record again the good work and interest of the clinic staff.

G. HAMILTON WHALLEY,
Medical Officer-in-Charge of the Special Skin Clinic.

CASES AND TREATMENTS 1944-53.

Year.	PATIENTS TREATED.				No. of Treatments.	Average No. of Treatments per Patient.
	Scabies.	Pediculosis.	Other.	Total.		
1944	4,956	166	*	5,122	11,798	2.30
1945	3,820	285	*	4,105	10,105	2.46
1946	3,560	159	*	3,719	10,030	2.69
1947	2,104	168	*	2,272	7,595	3.34
1948	1,329	335	*	1,664	5,706	3.43
1949	532	382	17	931	2,722	2.92
1950	274	441	4	719	1,536	2.14
1951	289	567	14	870	1,521	1.75
1952	182	498	42	722	1,004	1.39
1953	97	587	3	687	910	1.32

*Not extracted from final diagnoses.

SEX AND AGE DISTRIBUTION.

Age Group.	SCABIES.			PEDICULOSIS.						Total.
	Male.	Female.	Total.	Capitis.		Corporis.		Pubis.		
				Male.	Female.	Male.	Female.	Male.	Female.	
0-1	1 (1)	1 (-)	2 (1)	- (-)	..	..	..	..	..	..
1-5	4 (8)	12 (25)	16 (33)	- (3)	1 (5)	..	- (1)	..	..	1 (9)
5-15	8 (14)	6 (24)	14 (38)	1 (5)	6 (6)	- (2)	- (2)	..	..	7 (15)
15—	47 (69)	18 (41)	65 (110)	- (-)	2 (5)	568 (459)	- (4)	9 (5)	- (1)	579 (474)
Totals .	60 (92)	37 (90)	97 (182)	1 (8)	9 (16)	568 (461)	- (7)	9 (5)	- (1)	587 (498)

VENEREAL DISEASES STATISTICS.*

During 1953, 1,069 (+123) persons attended the Venereal Diseases Clinic for the first time and, together with the patients already on the register, accounted for 13,251 (+598) attendances. These statistics are not so formidable as they may appear inasmuch as 77% (+2%) of new patients were found to be free from venereal disease but, again, I would draw your attention to the steady incidence of non-gonococcal urethritis which, I feel, must be regarded as a venereal infection in some cases.

The grand total of Newcastle patients suffering from syphilis showed a decrease compared with the previous year and amounted to 750 (—54). It will be noted that many of those patients are no longer receiving active treatment for their infection but are under clinical and serological surveillance. Of 57 (—7) new patients found to have syphilis, 5 had inherited the disease.

Syphilis in pregnancy :—Only 6 (—15) women came to our notice during the year through the Ante-natal Wassermann scheme, and in only 3 (—11) was syphilis found. A further 33 (+7) patients who became pregnant in 1953 were already on our register, so that 36 (—4) pregnant women received antispecific therapy with a view to safeguarding their unborn children. It is gratifying to note that all 36 (+4) received what is deemed to be adequate treatment, and the outcome of their pregnancies amply reflects the efficacy of modern therapy inasmuch as not one single baby was born with this tragic disease. Thus, 11 babies were found to be free from syphilis ; a further 11 infants were likewise free from the disease, although it must be admitted they had not completed their tests by the end of the year. There were two miscarriages, one stillbirth, and the remaining 11 women had not been delivered by the 31st of December, 1953.

Laboratory work :—5,136 (—754) specimens were examined and of those, 1,880 (—708) were investigated in the Venereal Diseases department.

Before closing this brief report, it is necessary to pay tribute to the services rendered by the Medico-social Unit personnel. No less than 1,342 domiciliary visits were made to patients defaulting from treatment or surveillance, or to those who were alleged to be disseminators of, or at least infected with, venereal disease.

*Deviation from 1952 statistics is indicated in parenthesis, where the difference is prefixed by a + or — sign.

W. V. MACFARLANE,
Medical Officer.

CHEST CLINICS.
MASS RADIOGRAPHY.

IV—TUBERCULOSIS.

CONTACT CLINICS.
CARE AND AFTER CARE.

TUBERCULOSIS.

There has been an increase in the number of new cases of Tuberculosis notified (476 pulmonary and 68 other forms, as against 430 and 64 respectively in 1952), whilst the death rate for pulmonary tuberculosis has fallen from 0.328 in 1952 to 0.280 in 1953. There were 81 deaths from pulmonary tuberculosis and 12 from non-pulmonary, as against 95 and 12 respectively in 1952. The number of cases on the register at the end of the year was 2,970 pulmonary and 464 other forms, a total of 3,434.

Notifications.—During the year, primary notifications were received as follows :—

<i>Lungs.</i>	<i>Other Forms.</i>	<i>Total.</i>
476 (East 230) (West 246)	68 (East 36) (West 32)	544 (East 266) (West 278)

There were also 30 second and 1 third notification which appear on the register as duplicates.

Source of Notification :—

	Total.	East.	West.
General Practitioner .	189 or 34.7%	120 or 45.1%	69 or 24.9%
Clinical Medical Staff .	211 or 38.9%	82 or 30.6%	129 or 46.5%
Other Sources (hos- pitals, death returns, etc.)	144 or 26.4%	64 or 24.3%	80 or 28.6%
	544	266	278

In addition, 69 notifications (66 lung and 3 other forms) were received of cases previously notified elsewhere which had moved into Newcastle during the year.

AGE DISTRIBUTION OF PRIMARY NOTIFICATIONS DURING 1953.

	AGE GROUPS.													Total.
	0 to 1	1 to 2	2 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and up- wards	
Respiratory—														
Males .....	..	..	4	9	11	29	27	38	50	36	41	11	3	259
Females ..	1	..	3	6	15	33	47	70	20	12	7	3	..	217
Non-Respiratory														
Males	1	1	5	4	1	7	4	3	7	4	2	1	..	40
Females ..	..	1	1	4	2	5	3	6	2	1	1	..	2	28
Totals	2	2	13	23	29	74	81	117	79	53	51	15	5	544

DEATHS FROM RESPIRATORY TUBERCULOSIS.

	Deaths which occurred in these years.								
	1947	1948	1949	1950	1951	1952	1953.		
							M.	F.	Total.
Persons not notified before death	12	18	16	22	14	19	10	2	12
„ notified under 1 mth.	27	30	17	15	9	5	7	2	9
„ between 1 and 3 „	23	16	26	9	5	3	1	..	1
„ between 3 and 6 „	24	20	15	7	5	4	1	1	2
Total under 6 months	86	84	74	53	33	31	19	5	24
Persons notified between—									
6 and 12 months	24	30	21	8	11	7	3	4	7
12 and 18 months ...	13	15	23	15	8	6	1	1	2
1 and 24 months ...	26	9	12	13	6	6	3	2	5
2 and 3 years	30	22	16	20	14	8	6	6	12
over 3 years	80	70	76	74	38	36	17	14	31
Totals	259	230	222	183	110	94	49	32	81

COMPARATIVE FIGURES OF ATTACK AND DEATH RATES (ALL FORMS) PER 1,000 POPULATION.

	1949		1950		1951		1952		1953	
	Death Rate	Attack Rate	Death Rate	Attack Rate	Death Rate	Attack Rate	Death Rate	Attack Rate	Death Rate	Attack Rate
Newcastle on Tyne..	0.83	2.08	0.70	2.05	0.43	1.90	0.37	1.70	0.32	1.88
England and Wales..	0.457	1.19	0.36	1.13	0.316	1.12	0.24	1.09	0.20*	1.05*
Glasgow	1.14	2.90	0.98	2.56	0.74	2.35	0.586	2.35	0.47	2.45
Scotland	0.67	1.99	0.54	1.87	0.43	1.80	0.32	1.69	0.26*	N.A.

* Provisional figures.

The City is served by two Chest Clinics under the control of the Regional Hospital Board, one covering the East End and the other the West End, and each with a Chest Physician in charge who also supervises the domiciliary visiting and preventive measures on behalf of the Medical Officer of Health, and I am indebted to these two officers for much of the information which follows. Unfortunately the area served by these clinics does not coincide exactly with the City boundaries, and consequently the figures relating to the work of the clinics include a small number of non-City residents.

Daily sessions are held for the examination of old and new patients and contacts, whilst one evening clinic is held for the benefit of those who are at work all day. X-ray facilities and the services of a whole-time radiographer are available.

The total attendances at the Chest Clinics amounted to 34,872, of which 5,553 were in respect of new patients and contacts, 13,391 were by old patients, and the remainder were for artificial pneumothorax and pneumoperitoneum refills, Mantoux tests, etc. The medical staff paid domiciliary visits to 175 patients too ill to attend the Clinics.

14,407 X-ray films were taken at the clinics and 1,668 contacts were referred to the Mass Miniature Radiography Unit for X-ray. In addition, 174 X-rays were taken at Walkergate Hospital.

The Mass Radiography Unit continues to play an important part in the examination of contacts and suspects, and in the early diagnosis of Tuberculosis, and I am indebted to Dr. Hurrell, the Medical Officer in charge of the Unit, for the report which appears on page 101.

Care and After-Care.

A whole-time almoner is attached to each clinic to deal with the care and after-care of patients. These almoners are in the direct employ of the Local Health Authority, which also provides clerical assistance. There has been some improvement in the housing situation and it is pleasing to report that 98 Newcastle patients suffering from Tuberculosis were rehoused during the year. As regards rehabilitation, many treated patients re-orientate themselves into society without much assistance, but for the group of patients without trade or vocation and little adaptability, and those in the fourth and fifth decades, the prospect of employment presents a serious difficulty. In this connection, the Disablement Resettlement Officer of the Ministry of Labour visits the clinics to interview such patients, and the results have been very satisfactory. In addition, occupational therapy classes are held on four afternoons each week at specially adapted premises.

During the year the almoners interviewed 624 new patients, gave 4,257 other interviews, paid 146 home visits, and, in all, assisted 2,097 patients. The District Health Visitors carry out routine visiting of patients and contacts, and work in close co-operation with the Chest Clinics where clerks are employed specially for this work. During the year the Health Visitors paid 944 primary visits and 10,860 subsequent visits.

B.C.G. Vaccination.

Special contact clinics are held for children under 5 years and for schoolchildren and a report on this work will be found on page 102. At the Chest Clinics, 93 contacts were vaccinated with B.C.G.

After-Death Notifications.

Detailed information here continues to be scanty. Of the 12 recorded one at least was known to have had Angina for some years and the acceptance of this case as a death due to Pulmonary Tuberculosis was probably an error. In all cases the customary Health Visitor visit was made, but with very little response from those whom these efforts were meant to help. There is indeed here scope for further enquiry and redoubled efforts to ascertain whether the inclusion of a case in this category is due to laxity or to increased endeavour to ascertain the true cause of death by post-mortem.

Chronic Infectious Pulmonary Tuberculosis.

No exact assessment can be made of the true "Infector Pool," but some idea of its probable size can be gained from the fact that, as shown in the table on page 100, at the end of the year there were 3,604 definite cases of tuberculosis on the registers, and 327 of these were known to have positive sputum during the preceding 6 months. It is quite clear that the more assiduously we search for tubercle bacilli the greater this figure is likely to be, and if all sputum specimens could be cultured this figure would certainly be much higher.

During the year, the current records of known cases of pulmonary tuberculosis in the City were reviewed, and of these, 512 were classified as chronic infectious cases—that is to say, cases in which treatment was not likely to cause any change in the pulmonary lesion or make the patient non-infectious. The details of the cases are as follows :—

Newcastle residents at home	415
Newcastle residents in sanatorium or hospital	97
	<hr/>
	512
	<hr/>

The age distribution of these cases was similar to that of the notifications. There was a large proportion of middle aged men and young women. The number of patients who die each year and the

rate at which chronic infectious cases are found was considered and it seems likely that these two changing groups balance each other so that for some years at any rate the number of chronic infectious cases is likely to stay constant. This pool of infection is very important because many of the persons in it infect other people. The importance of preventive work in the house and of prompt contact examination is therefore obvious. Equally the necessity for taking preventive measures in works or factories where some of the patients were working before diagnosis is important. The following examples may be given. In the investigation of a group of 276 cases, 105 were found to have infected at least one other member of their household. One patient infected three members of his family, one of whom developed miliary tuberculosis. In a small factory employing 55 persons and in which a case of pulmonary tuberculosis had occurred, 8 other persons were subsequently found to be suffering from pulmonary tuberculosis. The problem of these chronic infectious cases can only be minimised by continued preventive work in every possible way. It could also be assisted by the provision of a hostel or hostels which could accommodate some people who live in lodgings or tenements where they are a great source of infection.

New Cases of Pulmonary Tuberculosis.

The Table shown on page 100 which is a copy of the official return to the Ministry of Health, indicates a rise in incidence of new cases. Some of this is real, as shown by the notifications, but some is only apparent, due to bringing into our current records those cases notified in previous years but not seen at the Clinic, e.g. orthopædic or pædiatric cases under the personal supervision of a Clinician elsewhere.

That a considerable number of new cases of Tuberculosis do still occur is disconcerting, especially when we consider the following figures of notifications of Pulmonary Tuberculosis for Newcastle City :—

1947	....	540.
1951	....	484.
1952	....	430.
1953	....	476.

What type of cases are these that are now coming to us—are they cases of old or recent disease? In an effort to estimate the position, the records of 230 cases of pulmonary tuberculosis occurring in 1953

have been scrutinised and in 157 information was sufficient to give an indication of the approximate age of the disease. For example, in many cases, there was evidence that a film had been reported as normal at a previous examination, or there was a history of a visit to an M.M.R. Unit a year ago. Disease which cleared quickly with chemotherapy was accepted, rightly or wrongly, as of relatively "recent" origin. The designation "recent" was taken to mean disease of duration not more than twelve months. Of these 157 cases 82 were "recent" and 75 were "old" disease. Observation error was probably in favour of the "old" group being underestimated so that it is quite correct to say that at least HALF of the new cases of pulmonary tuberculosis are due to disease more than a year old. This should encourage the drive to find the occult case, of which special mention is made below.

The Search for New Cases of Tuberculosis.

During the year it was decided to tuberculin test school entrants and concentrate Chest x-ray investigation on those families whose children had already converted. This work was carried out in conjunction with the School Medical Officer, and the Chest Clinic investigated adults referred to it after M.M.R. screening. The whole area has not yet been covered but in Newcastle the results were somewhat "disappointing" compared with the Bournemouth figure—so far only one unknown case of pulmonary tuberculosis having been discovered. Perhaps tuberculosis in Newcastle is not so "occult" as in some other areas.

However, one must not forget that the child of five years of age is quite mobile and so may have acquired his primary infection outside the home. Is it not reasonable to expect that routine tuberculin testing of the six months and twelve months' old infant would be more fruitful?

Concentration of our main efforts to find new cases of tuberculosis may require to be reviewed—times change and so does the pattern of society and with it the distribution of sources of infection. Much emphasis has been placed in the past on examination of house contacts of notified cases of tuberculosis, but is this now really such a fruitful source as has been the case?

Social Conditions.

A study of the record cards of 889 patients revealed that whilst three-quarters were living in two or three bedroomed houses, only 74 were sleeping in a separate room and more than half of the remainder

not only shared the room but also shared the bed. 343 of the cases were living in Council houses.

Conclusion.

It is evident that there is a steady increase in the volume extent and diversity of the problems presented to the Chest Service. Tuberculosis is not now the killer it used to be, though it will still be a tough and wily adversary for many years to come. Malignant disease is a growing menace to life, and the large number of non-infective chronic lung affections which are so crippling still remains to be tackled.

Money spent on increased laboratory and hospital facilities, with sufficient trained staff, will be amply repaid by shorter and less frequent absences from work.

Treatment.—The following table is a copy of the annual return submitted to the Ministry of Health under Memo. T.145.

TREATMENT OF TUBERCULOSIS.

RETURN SHOWING THE WORK OF THE CLINICS.

[illegible]

TUBERCULOSIS NOTIFICATIONS AND DEATHS SINCE 1923.

100A

YEAR.	TUBERCULOSIS.											
	PULMONARY.				NON-PULMONARY.				TOTAL.			
	New Cases Notified.	Number of Deaths.	Death Rate per 1,000 Population.	Attack Rate per 1,000 Population.	New Cases Notified.	Number of Deaths.	Death Rate per 1,000 Population.	Attack Rate per 1,000 Population.	New Cases Notified.	Number of Deaths.	Death Rate per 1,000 Population.	Attack Rate per 1,000 Population.
1923	544	311	1.10	1.92	289	103	0.36	1.02	833	414	1.46	2.9
1924	540	322	1.12	1.89	272	99	0.35	0.95	812	421	1.47	2.8
1925	546	343	1.20	1.91	303	101	0.35	1.06	849	444	1.55	2.9
1926	580	331	1.16	2.04	292	84	0.30	1.02	872	415	1.46	3.1
1927	504	316	1.09	1.75	270	84	0.29	0.94	774	400	1.38	2.7
1928	508	295	1.05	1.80	280	77	0.27	1.00	788	372	1.32	2.8
1929	551	309	1.09	1.94	236	75	0.26	0.83	787	384	1.35	2.8
1930	507	298	1.05	1.79	212	67	0.24	0.75	719	365	1.29	2.5
1931	507	303	1.07	1.79	232	94	0.33	0.82	739	397	1.40	2.6
1932	432	277	0.98	1.52	207	64	0.22	0.73	639	341	1.20	2.2
1933	428	262	0.91	1.49	191	67	0.23	0.66	619	329	1.14	2.2
1934	464	280	0.97	1.62	140	51	0.18	0.49	604	331	1.15	2.1
1935	464	240	0.82	1.59	176	63	0.22	0.60	640	303	1.04	2.2
1936	449	265	0.90	1.55	135	43	0.14	0.46	584	308	1.04	2.0
1937	489	270	0.93	1.68	137	54	0.19	0.47	626	324	1.12	2.1
1938	481	249	0.85	1.65	158	44	0.15	0.54	639	293	1.00	2.2
1939	428	232	0.82	1.51	143	47	0.17	0.50	571	279	0.99	2.0
1940	465	251	0.98	1.82	123	51	0.20	0.48	588	302	1.18	2.3
1941	483	249	0.98	1.89	130	56	0.22	0.51	613	305	1.20	2.4
1942	511	219	0.86	2.01	136	58	0.23	0.53	647	277	1.09	2.5
1943	595	270	1.06	2.33	140	55	0.21	0.55	735	325	1.27	2.9
1944	547	233	0.89	2.08	147	68	0.26	0.56	694	301	1.15	2.6
1945	580	227	0.85	2.18	115	47	0.18	0.43	695	274	1.03	3.0
1946	572	227	0.80	2.02	105	36	0.13	0.37	677	263	0.93	2.4
1947	546	259	0.89	1.88	98	39	0.13	0.34	644	298	1.02	2.2
1948	596	228	0.78	2.03	97	26	0.09	0.33	693	254	0.87	2.36
1949	516	222	0.75	1.75	94	24	0.08	0.32	610	246	0.83	2.07
1950	532	183	0.62	1.81	73	25	0.08	0.25	605	208	0.70	2.06
1951	485	110	0.38	1.66	71	14	0.05	0.24	556	124	0.43	1.90
1952	430	95	0.33	1.48	64	12	0.04	0.22	494	107	0.37	1.70
1953	476	81	0.28	1.64	68	12	0.04	0.24	544	93	0.32	1.88

MASS RADIOGRAPHY UNIT.

This unit is situated in the grounds of Newcastle General Hospital. From January/June, 1953, it consisted of a static unit which could be transported to a factory or other place outside the hospital. Since June it has been supplemented by the addition of a Standard Mobile Mass Radiography Unit housed in two vans, one for the x-ray machine and dark room and the other for the generator. This unit is completely self-contained and fully equipped. Its advent has greatly helped in the work because the original static unit is now fixed in the hospital working an unbroken programme.

During the year 55,676 films were taken by the two pieces of apparatus as is shown by the following table.

GROUP.	Total Attend- ances.	Kept under obser- vation at M.M.R.	Referred to chest clinics for inves- tigation.	Confirmed as active tuber- culosis.
Doctors' patients.....	10,434	27	663	189
Maternity cases	2,276	3	13	6
Sent by chest clinics	1,668	—	102	8
National service recruits	6,221	6	89	12
Schoolchildren	7,264	10	48	18
School Staff	701	1	9	—
General Public Sessions	6,908	7	87	18
Surveys (Works, Factories & Offices)	18,234	15	186	57
Special survey by large films in two collieries in North- umberland	1,970	—	38	3
Totals	55,676	69	1,235	311

Attention must be drawn to Doctors' patients, 10,434, sent by general practitioners for a rapid x-ray report. These sessions started in 1944 by Dr. W. H. Dickinson and they have increased in size each year. The patients can attend on three days in the week. General practitioners value this facility and make good use of it.

The value of a Mass Radiography Unit working in close collabora-
tion with a chest clinic is very apparent. Many contacts have been
x-rayed by it as has been mentioned earlier in this report, and the same
medical staff are responsible for both. Patients can be x-rayed at
either to suit the convenience of the patient or the staff, and the
arrangement has many other advantages.

CHILDREN'S TUBERCULOSIS CONTACT CLINICS.

This report has been submitted by Dr. Mary Taylor,
Childhood Tuberculosis Officer.

The Children's Contact Clinics established in 1941 for the supervision of young children known to be in contact with tuberculosis have been maintained and expanded during recent years. The appointment in 1952 of a childhood tuberculosis officer responsible for this work has resulted in closer co-operation between the children's hospitals, the chest clinics, and the family doctors. Two sessions are now held weekly for children under five years of age—one at the East End Health Centre, Shields Road, and the other at the Newcastle General Hospital. A third session is limited to B.C.G. vaccination and tuberculin testing before and after vaccination. All young children vaccinated with B.C.G. are subsequently seen regularly at the ordinary sessions. It is becoming more generally realised that arrangements for vaccination in the case of new-born infants should be considered in the ante-natal period. This sometimes necessitates hospital delivery followed by segregation in a residential nursery, but whenever possible arrangements are made for the infants to be cared for by relatives. B.C.G. vaccination while still in contact with an active or potentially infective case of tuberculosis is not practised.

Contacts of school age are seen at the two chest clinics, and the session at the West End Clinic is under the care of the childhood tuberculosis officer.

A report covering the work of the Contact Clinic for children under 5 years of age is presented below, and a discussion concerning death from tuberculosis in childhood is presented in Appendix IV on page 180.

During 1953, 640 new children were registered at the Contact Clinics of whom 63 were over 5 years of age. These mostly attended with younger brothers and sisters and 29 were vaccinated with B.C.G.

Contacts of Newly Diagnosed Cases of Tuberculosis.

Of the children under 5 years of age, 141 were contacts of newly diagnosed patients. Of these, 34 were tuberculin positive when first

seen (24%) and of the 107 negative, 80 have completed B.C.G. vaccination. In the case of the 34 already infected, the mother was the index case in 15, the father in 16 and other persons in 3.

The corresponding figures for 1952 are shown in Tables 1 and 2.

Table 1.

Children under 5 years of age seen as contacts of newly diagnosed patients.

Year.	Total children.	Tuberculin Positive.	%	Tuberculin negative.	Given B.C.G.	%
1952....	103	41	40	62	33	53
1953....	141	34	24	107	80	75

Table 2.

Relationship of Index Case in those infected (1952 and 1953).

Mother.	Father.	Other Relative.	Total infected.
32	31	12	75

Children under 5 years of age.

Of the 577 children under 5 years of age seen for the first time in 1953, 80 were already tuberculin positive (14%).

Table 3.

New cases under 5 years of age.

Year.	Total.	Tuberculin positive.	% positive.
1952..	469	76	16
1953..	577	80	14

Of these, 26 were known to be infected before they were seen at the clinic. 45 of the others were diagnosed at their first visit and 9 at subsequent visits. Nine of the 80 children have required in-patient hospital care either before or after attendance at the clinic. One child died at the age of nine months and 3 others have since developed

miliary tuberculosis (March, 1954) and are under treatment. One other presented with tuberculous dactylitis and 2 had erythema nodosum. Of the infected children, 28 were under 2 years of age. A further 80 were tuberculin positive following B.C.G. vaccination (almost all in Maternity Units). Of the 417 negative children, 43 have been discharged as not in contact, 154 have completed B.C.G. vaccination and 211 are still under supervision. The majority of these are not in contact with active cases.

B.C.G. Vaccination.

Vaccination with B.C.G. during the year numbered 482. of whom 221 were done in the Contact Clinics, 65 at the West Chest Clinic, 28 at the East Chest Clinic, 91 at the Maternity Department of the Newcastle General Hospital, and 37 at the Princess Mary Maternity Hospital. In addition, 37 members of the nursing staff at the Newcastle General Hospital were also vaccinated.

**REPORT OF THE
CHIEF SANITARY INSPECTOR**

**V—FOOD AND DRUGS,
NUISANCES, HOUSING,
FACTORIES, Etc.**

ANNUAL REPORT OF THE CHIEF SANITARY INSPECTOR for the Year 1953.

I have pleasure in submitting the Report upon the work carried out by my section of the Department. In last year's Report reference was made to an increased demand by the public upon the services of the Department. This year the demand was again outstanding and despite inspectorial staff shortage, which is common to other large industrial cities, the demands were not only fully satisfied but the service to the public in other ways was advanced.

The Town Hall.

The adverse working conditions in the Town Hall, under which the affairs of the City are administered by the departmental staffs, have been brought to notice on various occasions. These adverse conditions largely arose as a result of the numerical increase in departments and staffs, and to meet their needs cutting up and carving of rooms commenced many years ago and continued until space was no longer available for the purpose. The effect of this piecemeal work is that of a labyrinth of corridors, passages, office rooms and cubby holes, which perplexes and bewilders all except those who, from long experience, have become familiar with all the "ins" and "outs". On the outstanding question of a new Town Hall a deputation from the City Council met the Minister and on his representative's visit, a report stressing the urgent and vital need for suitable and sufficient accommodation for the staffs was submitted. A paragraph in the report aptly sums up the Town Hall as :—

“ A classic example of possessing everything, with few exceptions, that a good block of office premises should not have.”

The Temperance Festival.

A comprehensive report as to the sanitary provisions which should be operated during the holding of the Temperance Festival on the Town Moor in Race Week was submitted to the Health Committee, and subsequently it was circulated to the Town Moor and Parks Committee. Meetings were held between the two Committees on the matter, and as a result some improvements were effected in this year's sanitary arrangements. The position to be catered for is that a small town springs up on the Moor, remains there for three weeks and during the middle (Festival) week maximum density is reached.

Resident showmen and their families numbered round about 1,400 and to this must be added a fair number of non-resident stall occupiers. Amidst the very large number of amusement shows and stalls, 250 food premises of mobile and immobile types were present and from which a wide range of foodstuffs (apart from a main meal) could be purchased ordinarily or by way of a prize. This large assembly attracted daily a great number of patrons from many parts and presented its special problems from a health point of view. Next year further improvements in the sanitary arrangements are anticipated to be carried out.

Milk Supply.

The Minister of Food in November made an order specifying an area in which the City is included. The operative effect of the order is to cause all milk, other than T.T. or Accredited, to be heat-treated before retail sale for human consumption. T.T. milk may be sold retail in a raw state, similarly, Accredited may be so sold but only until October, 1954, and undesignated milk has now ceased to be sold retail. T.T. milk may also be sold Pasteurised or Sterilised.

The supply of milk coming into the City is derived from many sources in the North and formerly it was generally delivered direct to a considerable number of small registered dairies. It now, in the main, is delivered to four large dairies where efficient heat treatment installations are provided. The small dairymen who formerly dealt with bulk milk on their own premises now collect heat-treated bottled milk from the four large dairies daily, and return thereto the empty vessels for cleansing.

Points of view may differ as to the merits or otherwise of this arrangement for the centralisation and heat-treatment of the bulk supply of milk, but from a public health aspect, supervision over the storage, treatment and distribution of the milk is now more efficiently carried out than was previously possible and further the major portion of the milk is rendered a "safe" milk by the heat-treatment.

Slum Clearance.

A programme of slum clearance, comprising 4,540 houses, 9,728 families, with a population of 31,518, was submitted to the Health Committee and subsequently it was approved by the City Council on 20th June, 1953.

The houses, clustered together in varying numbers, are situated mainly from East to West in the congested areas of the City. The largest groups being in the Scotswood Road, Shieldfield and Byker areas. The time proposed in the programme for the Health Committee's work in dealing with all of the houses is a maximum of ten years. The first two years of this period are earmarked for (a) some of the houses in the Scotswood Road group, viz., Scotswood Road (Noble Street) area (b) the pre-war condemned houses in the Blandford Street area and (c) houses in Shieldfield, a total of 1,196 houses, 2,426 families with a population of 7,774 for these two years. As to the remainder of the work, it is to be time-tabled for action early in the next year. A commencement of slum clearance work was intended to be made immediately upon the approval of the programme by the City Council. Unfortunately, a setback caused by staff shortage occurred, and it was not possible to go ahead with this overdue work until near the end of the year.

Condemned Dwelling-houses—Re-housing.

The Housing Department re-housed ninety-nine families during the year. At the beginning of the year, 951 families awaited their new houses and on the condemnation of eight dwelling-houses by the Health Committee, the number was increased by fourteen, leaving at the end of the year, 866 families to be re-housed. The deplorable structural conditions of these houses under which the great majority of the families must exist have been reported again and again. Each year these conditions worsen, misery increases and any amelioration of the conditions, even to a slight degree, is often a practical impossibility. Nothing short of major structural works would be of avail in the houses and this it is impossible to secure.

Immediate re-housing of the families is not only now an urgent need but also a vital necessity.

Maintenance of Houses.

A general overhaul of houses was a common practice by owners in former years. To-day this essential work is virtually non-existent and inspectorial service in the matter of maintenance and repair of houses is now in increasing demand. The situation is a difficult one as cost of works still tend to increase over the present high level, rentals are static by Rent Control, financial resources of many owners are nil, and in many instances brought to notice the houses are a financial burden upon the owners.

Of the houses scheduled in the Slum Clearance Programme, efforts were again directed to create "more tolerable" conditions for the occupiers. In regard to other houses, advice and help was freely given where more than ordinary difficulties were present, so that the required work could be carried out. Generally it is hoped that the new legislation on housing, at present under discussion in Parliament, will be of material help in disposing of or at least easing many or all of the present housing difficulties.

Clean Food.

The policy of the department of direct contact with all engaged in the handling, storage, preparation and sale of foodstuffs for human consumption has again been carried out.

Many lectures and addresses have been given at meetings but the results therefrom, for many reasons, are not readily seen. In the business premises, however, the direct contact of inspector and employees in the kitchen and other rooms on the matter of clean food is much more personal and does prove very effective in results. On the part of the public, material assistance would be afforded in raising the standard of the food arrangements in premises, if when cause for complaint is found, it be made immediately to the occupier of the premises concerned, then afterwards to the department. Much advice has been given to the "Barrow Boys" on many occasions as to improvements in their sale of food arrangements, but despite these kindly efforts and the issue of cautioning letters, offences under the bye-laws as to the Sale of Food in the open air continued, and after report to the Committee, prosecutions were instituted against four offenders, who were convicted and fines totalling £7 4s. 0d. plus £7 7s. 0d. costs incurred.

The Markets.

No progress has been made with the third stage of improvements to the Markets, i.e., that of "improvements to and adding to" the existing sanitary accommodation for the use of employees engaged in the shops and stalls and for the public attending the markets.

The first stage carried out was that of improving the arrangement for the collection and disposal of refuse in all the markets. The second was the provision of suitable and sufficient washing facilities to the shops and stalls in the Grainger Market and Arcade. The third stage was to follow on the completion of the second stage. On the conclusion of the third stage, which also includes some minor structural work

on the shops and stalls, the conditions in the Green and Vegetable Market are to come under consideration and report.

Food Supply Sampling.

All of the samples submitted to the Public Analyst were found to be wholesome and unadulterated. Deficiencies in fat were, however, found in milk, a similar deficiency was detected in ice cream, and beef sausages were found to have too little meat content in them.

In the instance of the beef sausage sample the meat content was 41·70 per cent. The Public Analyst in his opinion stated 50 per cent. of meat should be the minimal amount. A prosecution was instituted, the defendant convicted and fined £1 plus £6 6s. 0d. costs. The Magistrates held that the beef sausage should have a meat content of not less than 50 per cent.

Household Drugs.

All the drugs in common use in households were sampled and in no instance were any samples found by the Public Analyst to be other than genuine.

FOOD AND DRUGS ACTS, 1938-1950.

Total Samples.

The total number of samples of all foodstuffs submitted to the Public Analyst was 1,002, this number being 32 less than the previous year's total samples. Of this number 691 were formal and 311 informal ones. The sampling rate was 3·45 per 1,000 population and 0·45 above the rate recommended by the Ministry of Agriculture and Fisheries.

Informal Samples.

The total number of informal samples taken was 127 less than last year's total of 438, the difference being accounted for by ceasing to take informal samples of milk.

Informal sampling affords a most useful guide as to the quality and wholesomeness of foodstuffs on sale for human consumption, and where any are found non-genuine immediate action follows in the taking of formal samples.

Samples not Genuine.

The total number of samples found "not genuine" by the Public Analyst was ten or 0·998 per cent of the total samples taken. The

preceding year's total was eight = 0·77 per cent. These non-genuine samples comprised four of milk (deficiencies in milk fat and non-fatty solids), one ice cream (fat deficiency), a minced chicken (labelled as 100 per cent. chicken and found to be 46·3 per cent. only), two cake mixtures with chellies (chellies found to have traces of Benzoic Acid in them), a bottle of soda water (contained a few stems of rhubarb) and one of sausage (insufficient meat content 41·7 per cent. found).

Extraneous Articles in Food.

Whilst no extraneous articles were found in the samples of food-stuffs submitted to the Public Analyst other than the bottle of soda water containing stems of rhubarb, there is not the slightest doubt but that many articles of food sold to the public do contain extraneous matters, harmful or otherwise. In a few instances only these are brought to official notice by way of complaint by the person aggrieved. It is impracticable to exercise a 100 per cent. control over all foodstuffs sold retail and in this particular matter, the co-operation of the public by way of complaint, together with the retention of the article complained of, would be of much assistance.

As to the complaints received they were in respect of the following articles and after full inquiry being made into each, report was made to the Health Committee with the results as tabulated.

<i>Article.</i>	<i>Extraneous Article.</i>	<i>Action by Committee.</i>
1. Soda Water.	Rhubarb.	Summons. Fined £2.
2. Bread Cake.	Cockroach.	Summons. Fined £10 plus £3 5s. 6d. costs.
3. Milk Bottle.	Broken Glass.	Summons. Fined £5 plus £3 3s. 0d. costs.
4. Milk Bottle.	Dirt.	Summons. Conditional discharge on payment of £2 2s. 0d. solicitor's fees and 4/- summons.
5. Milk Bottle.	Dirt.	Summons. Fined £15 plus £5 5s. 0d. costs.
6. Milk Bottle.	Dirt.	Summons. Fined £10 plus £3 3s. 0d. costs.
7. Milk Bottle.	Insects.	Summons. Fined £25 plus £6 5s. 0d. costs.
8. Chocolate Egg.	Pieces of husk.	Caution letter to firm by Town Clerk.

MILK BACTERIOLOGICAL EXAMINATION.

Methylene Blue Test.

The Bacteriologist's reports as to the keeping qualities of the 775 raw milk and 368 processed milk samples sent to him, again show an unsatisfactory position. All of the samples, apart from the processed milk, are taken immediately the milk arrives at the dairies in the City or very soon after, thus no question of delay in taking samples in the City arises. Whilst an improvement this year of 1·78 per cent.

Samples taken for Analysis during the Year 1953.

ARTICLE.	No. of Samples obtained.			Result of Analysis.		REMARKS.
	Formal.	Informal.	Total.	Genuine.	Non-Genuine.	
Milk	609	..	609	605	4	Four samples, 616, 647, 648 and 649 in course of delivery from producer were all not genuine. Producer prosecuted and although the cases were proved given an absolute discharge on payment of costs of 4 summonses—16/-.
Condensed Milk	3	3	3	..	
Cream	1	8	9	9	..	
Bacon	5	5	5	..	
Butter	1	7	8	8	..	
Cheese	5	5	5	..	
Cocoa	1	1	1	..	
Coffee and Coffee Essences	4	4	4	..	
Cooking Fat and Lard	6	6	6	..	
Margarine	6	6	6	..	
Sugar	7	7	7	..	
Tea	7	7	7	..	
Almonds (Ground)	2	2	2	..	
Baking Powder	3	3	3	..	
Barley and Barley Crystals	2	2	2	..	
Beans—Baked, etc.	3	3	3	..	
Biscuits	6	6	6	..	
Black Pudding.....	..	1	1	1	..	
Blancmange Powder	2	2	2	..	
Bread	1	1	1	..	
Cake Mixture with Chellies	1	1	2	..	2	Informal sample No. 755 Chellies contained 200 parts Benzoic Acid per million. Formal sample No. 973 contained 150 parts per million. Further samples did not show presence of Benzoic Acid.
Cinnamon (Ground)	2	2	2	..	Minced chicken contained 53% added water. Formal sample taken Jan., 1954—genuine as label had been altered.
Chicken (Mixed)	1	1	..	1	
Cherries (Glace)	2	2	2	..	
Chocolate Roll	1	1	1	..	
Chocolate Spread	2	2	2	..	
Christmas Pudding	2	2	2	..	
Cloves	1	1	1	..	
Cornflour	2	2	2	..	
Currants	3	3	3	..	
Curry Powder	2	2	2	..	
Custard Powder.....	..	7	7	7	..	
Dates.....	..	1	1	1	..	
Dessicated Coconut.....	..	3	3	3	..	
Dessert Powder	1	1	1	..	
Dripping	1	1	1	..	
Essences and Flavours	7	7	7	..	
Farinoca	1	1	1	..	
Fish Cakes	4	..	4	4	..	
Fish (Tinned)	3	3	3	..	
Flour and Self-raising Flour	2	2	2	..	
Fruit Pie.....	..	1	1	1	..	
Gelatin	1	1	1	..	
Ginger (Ground)	1	1	1	..	
Golden Raising Powder	1	1	1	..	
Gravy Powder	2	2	2	..	
Golden Syrup.....	..	1	1	1	..	
Ice Cream	45	..	45	44	1	Sample No. 445 deficient fat 48% Fined £10 and £3 3s. 0d. costs.
Ice Lollies.....	..	21	21	21	..	Letter from C.S.I. to manufacturer as to Labelling Order.
Jams and Marmalade	5	5	5	..	
Junket Powder	1	1	1	..	
Ketchup	2	2	2	..	
Lemon Curd	3	3	3	..	
Lemon and Mixed Peels.....	..	3	3	3	..	
Lentils.....	..	3	3	3	..	
Macaroni.....	..	2	2	2	..	
Meat Pies and Pasties	6	6	6	..	
Mince Meat	2	2	2	..	
Mint	1	1	1	..	
Mint Sauce	1	1	1	..	
Mustard	1	1	1	..	
Non-Brewed Condiment.....	..	3	3	3	..	
Oatmeal	2	2	2	..	
Pastes (Meat and Fish)	5	5	5	..	
Peas and Split Peas	2	2	2	..	
Pepper and Pepper Compound	4	4	4	..	
Polony	2	2	2	..	
Potato Crisps	3	3	3	..	
Peas Pudding	1	1	1	..	
Raisins and Sultanas	4	4	4	..	
Rice (Ground)	1	1	1	..	
Salt	1	1	1	..	
Sage.....	..	2	2	2	..	
Sage and Onion Stuffing	1	1	1	..	
Sago	1	1	1	..	
Salad Cream.....	..	1	1	1	..	
Sandwich Spread.....	..	1	1	1	..	
Saveloy	1	1	1	..	
Sauces and Pickles	3	3	3	..	
Savoury Snack (Beef).....	..	1	1	1	..	
Semolina	1	1	1	..	
Soups and Soup Powders.....	..	6	6	6	..	
Spices (Mixed)	2	2	2	..	
Sponge Mixture	1	1	1	..	
Steak and Onions	1	1	1	..	
Suet (Shredded).....	..	3	3	3	..	
Sweets and Toffees	2	6	8	8	..	
Savoury Welsh Rarebit	1	1	1	..	
Tapioca	3	3	3	..	
Table Jellies	3	3	3	..	
Tinned Fruit	2	2	2	..	
Vinegar	2	2	2	..	
Yoghurt	1	1	1	..	
Sausage	7	..	7	6	1	Sample No. 620. Deficient in meat content 16.6%. Vendor fined £1 and £6 6s. 0d. costs.
Orange Drinks	11	..	11	11	..	Contained rhubarb. Prosecuted—fined £2.
Pine-Ors	1	..	1	1	..	
Grapefruit Squash.....	1	..	1	1	..	
Sparkling Lime	1	..	1	1	..	
Tizer	1	..	1	1	..	
Lemonade.....	1	..	1	1	..	
Non-Alcoholic Wine	2	..	2	2	..	
Ginger Cordial	1	..	1	1	..	
Wines (Sherry and Port)	2	2	4	4	..	
Soda Water	1	1	..	1	
Lucozade	1	1	1	..	
Rum	2	2	2	..	
Gin	2	2	2	..	
Whisky	1	1	1	..	
Beer.....	..	4	4	4	..	
Stout	1	1	1	..	
Wynne (Ginger Flavour).....	..	1	1	1	..	
<i>Household Drugs</i>						
Glycerine and Ipecac. Mix.	2	2	2	..	Contained rhubarb. Prosecuted—fined £2.
Aspirin Tablets	2	2	2	..	
Boric Powder	2	2	2	..	
Boric Ointment	2	2	2	..	
Borax	2	2	2	..	
Bicarbonate of Soda	2	2	2	..	
Camphorated Oil	2	2	2	..	
Castor Oil	3	3	3	..	
Cod Liver Oil	1	1	1	..	
Cucurbita Sacchara	1	1	1	..	
Cough Syrup	1	1	1	..	
Fullers Earth Cream.....	..	2	2	2	..	
Glycerine	2	2	2	..	
High Carb. Magnesia.....	..	1	1	1	..	
Liquid Paraffin	2	2	2	..	
Epsom Salt	3	3	3	..	
Gregory's Powder	2	2	2	..	
Olive Oil	2	2	2	..	
Paracetamol	1	1	1	..	
Stomach Powder	1	1	1	..	
Sulphur Ointment	2	2	2	..	
Zinc Ointment	2	2	2	..	
Tinct. Iodine	2	2	2	..	
Vaniline	1	1	1	..	
TOTAL	691	311	1002	992	10	

over last year's raw milk samples is recorded, it but emphasises that the methods of production and distribution over which control is exercised elsewhere, should be very materially improved, as no less than 22·58 per cent. of these samples failed to pass the test. During the preceding four years, the percentage failures were :—

1949.	1950.	1951.	1952.
25·18	18·73	15·63	24·36

The sampling results of processed milk show 2·17 per cent. failing to pass the test as against 0·53 per cent. last year, a backward trend of 1·64 per cent.

Designation.	No. taken.	Satisfactory.	Unsatisfactory.	
			Meth. Blue	%
T.T. (Farm Bottled).....	152	137	15	9·86
T.T.	246	208	38	15·44
Accredited	37	30	7	18·9
Undesignated	340	225	115	33·82
Total.....	775	600	175	22·58
T.T. (Past.)	164	160	4	2·38
Pasteurised.....	204	200	4	1·92
Total.....	368	360	8	2·17

8 Methylene Blue Tests were declared void and are not included in the above summary.

TURBIDITY TEST.

Designation.	No. taken.	Satisfactory.	%
Sterilised.....	38	38	100
Total	38	38	100

Phosphatase Test.

372 samples of processed milk (181 processed in the City and 191 outside) have been submitted to this test to ascertain whether heat treatment of the milk had been carried out efficiently or otherwise. In 2 instances the samples failed the test.

PHOSPHATASE TEST.

Designation.	No. Taken.	Satisfactory.	%
T.T. (Past.)	166	165	99.4
Pasteurised	206	205	99.51
Total	372	370	99.46

4 Tests were declared void and are not included in above summary.

Details of all the foregoing failures were reported to the Ministry and also to the Local Authorities concerned.

Milk Samples.

The milk supply to the City was again under constant supervision. Whilst a number of samples were taken from vendors on the streets, by far the great majority were taken as the milk arrived in the City and before it was dealt with by the dairymen and distributors. 609 samples (60.77 per cent. of the total samples of foodstuffs) were taken during the year and submitted to the Public Analyst—4 of these (0.65 per cent. of the total milk samples) being certified to be below the standard set out in the Sale of Milk Regulations, 1939—viz., non-fatty solids 8.50 per cent. milk fat 3.00 per cent—any sample failing to reach this standard is presumed to be non-genuine until the contrary is proved. As to these 4 samples, one was deficient in non-fatty solids to the extent of 15.80 per cent. and in the other 3 non-fatty solids and milk fat were deficient, the former ranging from 16.10 to 15.20 per cent. and the latter 20.60 to 5.60 per cent. All of these deficient samples were from one source, a Cumberland producer.

“Appeal to Cow” samples were then taken which, upon analysis, were all found to be genuine.

Tuberculous Milk.

384 samples were submitted to the Bacteriologist for examination. Of this total, one was reported “positive”. Notification of this finding was immediately forwarded to the controlling authority in Northumberland.

Designation.	No. Taken.	Negative.	Positive.	Percentage. Positive
T.T. (Pasteurised) ...	13	13	—	—
T.T. (Farm Bottled) .	25	25	—	—
T.T.	91	91	—	—
Accredited	17	17	—	—
Undesignated	218	217	1	0.45
Pasteurised	16	16	—	—
Sterilised	4	4	—	—
Total	384	383	1	0.26

The percentage of milk samples found to contain tubercle bacilli during the past 34 years is as under :—

<i>Year.</i>	<i>Percentage of samples found Tuberculous.</i>	<i>Year.</i>	<i>Percentage of samples found Tuberculous.</i>
1920-29	4.5	1946.....	2.1
1930-39	2.8	1947.....	1.3
1940	5.7	1948.....	2.3
1941	2.3	1949.....	1.8
1942	5.0	1950.....	0.7
1943	3.0	1951.....	1.06
1944	3.1	1952.....	0.76
1945	0.8	1953.....	0.26

THE MILK AND DAIRIES REGULATIONS, 1949, SECTION 8, and THE FOOD AND DRUGS ACT, 1938, SECTION 22.

All milk premises were systematically inspected and apart from the detection of minor offences their condition was found to be satisfactory. During the year 130 applications were received for registration as retail purveyors of milk and after inspection of the premises all were granted.

The total number of premises registered to deal in milk is 771. Apart from the large dairies, "bottled milk only" is sold from the other registered retail premises.

Milk (Special Designations) Regulations, 1949.

976 licences to deal in designated milks were granted during the year.

The Public Health Act (Condensed Milk) Regulations, 1923, 1927.

Three samples of condensed milk were procured, all being certified genuine and in full compliance with the regulations.

Artificial Cream.

Artificial cream is made from the constituents of fresh cream and until April this latter commodity was prohibited for sale for human consumption, hence artificial cream could not legally be marketed before then. Little or no sale of fresh cream has been noted since the restrictions were removed and artificial cream has not as yet been on sale on the two premises registered for this purpose.

Ice Cream.

Annually registration of premises increases. During the year 72 additional premises (small shops from which a pre-packed ice cream is sold) were registered, making a total at the end of the year of 740. Of these, 664 sell a pre-packed ice cream, 47 retail open ice cream and 39 deal in both. In all, 1,911 inspections of these premises were carried out.

The quality of this foodstuff which is now an "all year round demand" was slightly better than last year's supply. 45 samples were submitted to the Public Analyst and of these one only had less than the minimal amount of fat (5.00 per cent.) as required by the legal standard. The average fat content of all the samples was 8.4 per cent. Last year this average was 8.30 per cent. 120 samples were also submitted to the Bacteriologist for grading and again a slight improvement is noted, as 74.17 per cent. were satisfactory as against the previous year's 72.44 per cent.

In the instances where a local manufacturer's ice cream fails to reach a satisfactory grade an immediate investigation follows to find the cause and where the manufacturer's premises are situate outside the City the manufacturer and controlling authority are forthwith notified. In no instance was an unsatisfactory sample unwholesome or unfit for human consumption.

PUBLIC ANALYST.

Number of Samples.	Manufactured.		Fat Content (Between).
	In City.	Outside City.	
1	1	—	5 per cent.
9	9	1	5 and 6 per cent.
7	7	—	6 and 7 "
4	2	2	7 and 8 "
3	2	1	8 and 9 "
7	3	4	9 and 10 "
5	—	5	10 and 11 "
3	—	3	11 and 12 "
6	—	6	over 12 "
45	24	21	Average Fat Content 8.47%

BACTERIOLOGIST.

Provi- sional Grade	Manufactured in City		Manufactured Outside City		TOTAL	
	No. of Samples	%	No. of Samples	%	No. of Samples	%
1	41	50.00	30	78.95	71	59.17
2	11	13.4	7	18.42	18	15.00
3	7	8.53	—	—	7	5.83
4	23	28.70	1	2.36	24	20.00
	82		38		120	100%

74.17
Satisfac-
tory.

25.83
Unsatis-
factory.

Ice Lollies.

Metallic contamination (lead, copper, tin, zinc) or otherwise of ice lollies came under enquiry and an investigation was made into the manufacture, storage and sale of the ice lollies in the City. All of the premises dealing in this foodstuff are registered, are subject to normal routine inspection, and in addition periodic sampling of ice lollies is carried out.

Samples of the ingredients used in the making, together with those of the finished articles were submitted to the Public Analyst and Bacteriologist. The Public Analyst certified all of his samples to be "genuine" and free from metallic contamination and the Bacteriologist reported all samples "free from pathogens".

In one premise only, a mould (tinned copper) was found to be "not fully satisfactory" and it was forthwith scrapped.

The total registered premises number 493 and of these, ice lollies are manufactured and sold from 176, whilst on the remainder retail sale only is carried out.

Butter and Margarine Warehouses.

The number of premises registered is the same as last year, viz., 2 Butter Factories and 30 Margarine Warehouses. Inspections of these premises were made on 102 occasions when conditions were found satisfactory.

14 samples of butter and margarine were submitted to the Public Analyst and all were certified genuine.

At the time of taking the samples, the containers, wrappers, etc., used in the packaging of these foodstuffs were examined and all were found to be in compliance with the Act.

Preservatives in Food.

The Public Analyst found in two samples only (cake mixture with chellies) a preservative, Benzoic acid, which, while declared on the labels, was not a permitted preservative under the Preservatives in Food Regulations, but on the taking of check samples no preservative was found. The matter was taken up with the manufacturers of the cake mixture, who subsequently amended the labels so as to conform with the requirements. In all other samples, the preservatives found were in compliance with the regulations.

Bakehouses.

The number of bakehouses on the register at the beginning of the year was 152, of which 4 were certified Basement Bakehouses. During the year, 7 of these premises (2 being certified ones) ceased to be so used.

Basement bakehouses are certified as to their suitability for baking purposes in periods of 5 years or less. The certification became due this year, and after inspection and report to the Health Committee, each occupier was granted a certificate for a period of 2 years and informed that upon the expiry of this period, a renewal of certificate would not be granted. Two of these bakehouses have now ceased and the occupiers of the remaining two are to secure other suitable premises.

During the inspections of these food premises nothing apart from minor offences was detected and generally conditions found were satisfactory.

No. of Factory Bakehouses	(Mechanical)	97
	(Non-mechanical) . . .	46
No. of Basement Bakehouses	(Mechanical)	2
	(Non-mechanical) . . .	—
Total		<u>145</u>

Restaurant Kitchens, etc.

Close supervision of the kitchens wherein a very considerable number of main meals are prepared daily has again been exercised. Whilst the extent of major improvements carried out this year is less than that carried out during each of the 3 preceding years, a general tightening up of arrangements for the hygienic storage, preparation and handling of foodstuffs has been effected.

In this work, the management and staffs of the premises have again given their willing and close co-operation which in the main has ensured satisfactory conditions to prevail during the 1,257 official inspections.

The changes occurring during the year in the number and type of these premises was a decrease of 7 Cafes, 1 Snack Bar and an increase of 12 Canteens.

The number and type of premises on the register at the end of the year was :—

Hotel Kitchens	47
Cafes and Restaurants	97
Snack Bars	33
Refreshment Rooms	2
Canteens	90
Coffee Stalls	1
Total	<u>270</u>

Fried Fish Shops.

Very few of the 139 registered premises cater for consumption of the prepared foodstuffs on the premises, the main trade being carried out during the evenings and to a lesser proportion at mid-day. In situation, the great majority of these premises are amidst the working class houses, old and new. Patrons, however, are by no means drawn exclusively from this type of area.

The premises are all well appointed for this purpose and inspections totalling 424 were carried out during the day and also during the evening hours of business, when conditions were found satisfactory.

WATER SUPPLY.

The supply of water is furnished to the City by the Newcastle and Gateshead Water Company who also supply other Tyneside areas. The main supply is pure upland surface water obtained from large catchment areas at Catcleugh (close to the Cheviots) and in lower Northumberland. Secondary water is from the River Tyne at Barrasford and Wylam. Reservoirs are situated at Catcleugh, Colt Crag, East and West Hallington, Swinburne and Whittle Dene. All the water is filtered and chlorinated at two stations situated at Whittle Dene and Throckley, 11 and 5 miles respectively west of the City.

The domestic water supply is piped from these stations into the City, whilst the riverside works are supplied by a separate trade main. The great majority of our 85,844 dwellinghouses are provided with an adequate internal water supply. In 475 of them, however (population approximately 1,760), the supply is by standpipes in the back yard, and in 2,900 others a supply is provided to the ground floor holdings by back yard standpipes, with an internal supply to the other floors.

The water supply throughout the year was satisfactory in quality and quantity and was not liable to have plumbo-solvent action.

In a colony of 10 houses situate in a rural outskirts of the City the water supply is derived from wells. From each one the water was periodically sampled.

Arrangements are now well advanced, however, to provide a piped supply of water to each of these houses within the ensuing 12 months.

Bacteriological Examination.

The domestic supply is sampled each week at Throckley Water Works from two other control stations outside of and west of the City, and also from supply taps on premises within the City.

Throughout the year 369 samples have been taken of which 2 were found to be unsatisfactory, with 6 others suspicious. In each of these 8 instances, immediate action was taken by the supplying Company and the matters were rectified.

Chemical Analysis.

4 samples were taken monthly from the domestic supply from different points within the City. In each sample the Public Analyst certified that the water was of satisfactory organic purity, its microscopical characteristics good, it was clear and bright and suitable for public supply.

Public Baths.

11 Public Baths (6 Plunge, Slipper and Washhouses, 3 Plunge and Slipper and 2 Plunge only) are available to the public. In addition, 2 schools have plunge baths for the use of scholars. "Break Point" chlorination of the water in each plunge bath is carried out. Samples of all the bath waters were regularly taken and submitted to the Bacteriologist for examination. In addition, the water was tested each week with the "chloroscope" by the inspectorial staff so as to ascertain its pH value and sterility.

Throughout the year all samples were satisfactory and the average pH value 7.2.

21A

*Not included in total number of Inspections

MATTERS DEALT WITH.	Dwelling Houses.	Tenem'ts.	Food Premises and Street Vendors.	Shops.	Offices.	Places of Public Resort.	Other Premises.	TOTALS.
Accumulations	45	30	11	10	6	7	4	113
Animal Nuisances	2	..	1	..	1	..	..	4
Cowsheds Cleansed .....	..	..	..	..	..	..	..	..
Cowsheds Repaired, Improved .....	..	..	..	..	..	..	..	..
Cooking Accommodation Repaired	1	1	..	..	..	..	..	2
Cooking Accommodation Provided	1	4	..	..	..	..	..	5
Dampness	527	73	5	3	..	1	..	609
Dustbins	522	87	48	49	14	5	4	729
Drain Tests Applied (General)	139	64	3	10	4	5	4	229
Drain Tests Applied (Rodent Control)	60	9	1	1	1	..	..	72
Drains Found Defective.....	58	18	..	5	1	1	1	84
Drains, Waste Pipes, Cleared	301	171	11	8	2	3	1	497
Drains/Soil/WastePipesRepaired/Renewed(Yds.)	678	349	15	63	27	7	48	1187 yds.
Drains/Soil/Waste Pipes Provided (Yds.)	56	..	5	5	21	..	..	87 yds.
Doors and Windows	854	168	17	1	2	1	..	1043
Ditches and Streams Cleansed .....	..	..	..	..	..	..	..	..
Floors	273	62	20	..	..	..	2	357
Food Stores Provided.....	7	4	..	..	..	..	..	11
Fireplaces/Flues	82	46	..	..	..	..	..	128
Lighting Improved	2	6	3	..	1	..	..	12
Manure Pits Emptied .....	..	..	..	..	..	..	..	..
Manure Pits Repaired/Improved .....	..	..	..	..	..	..	..	..
Offensive Trades (Contraventions Remedied) ..	..	..	..	..	..	..	..	..
Piggeries Cleansed.....	..	..	..	..	..	..	..	..
Piggeries Repaired/Provided .....	..	..	..	..	..	..	1	1
Roofs, Gutters, Spouting	1540	280	22	4	..	..	..	1846
Rooms Cleansed/Redecorated	18	36	95	10	1	15	1	176
Sanitary Accomodation Provided	17	2	4	2	4	10	..	39
Sanitary Accommodation Repaired	818	201	31	4	5	21	3	1083
Sanitary Accommodation Cleansed	10	26	14	5	..	2	2	59
Sinks/Wash Basins Repaired	60	11	..	..	..	..	..	71
Sinks/Wash Basins Provided	11	10	21	6	5	4	1	58
Sites Cleared .....	..	2	..	..	..	..	..	2
Stables Cleansed .....	..	..	..	..	..	..	4	4
Smoke Nuisances (Domestic)	107	38	..	..	..	..	..	145
Smoke Nuisances (Industrial) .....	..	..	..	..	..	..	2	2
Temperature Improved .....	..	1	..	..	..	..	..	1
Urinal Accommodation Provided (Ft.) .....	..	..	..	..	4	9	..	13ft.
Urinal Accommodation Cleansed .....	..	..	..	..	..	..	..	..
Ventilation Improved.....	6	1	5	3	2	3	..	20
Walls and Chimneys (External)	144	20	3	1	1	..	..	169
Walls and Ceilings (Internal)	879	272	73	..	..	1	..	1225
Washing Clothes Accommodation Provided ...	..	..	..	..	..	..	..	..
Washing Clothes Accommodation Repaired ...	5	4	..	..	..	..	..	9
Water Supply Provided (New)	1	9	16	4	1	1	1	33
Water (Hot) Installations Provided	7	3	81	5	4	8	1	109
Water Supply Reinstated	367	82	3	..	1	..	..	453
Yards Repaired/Relaid	90	18	5	..	..	1	1	115
Yards Cleansed/Limewashed	11	5	..	..	..	..	..	16
Other Nuisances	290	31	16	5	3	2	3	350
Housing Acts—								
Dwellinghouses Closed .....	..	8	..	..	..	..	..	8
Dwellinghouses Demolished .....	..	15	..	..	..	..	..	15
Dwellinghouses Rendered Fit (Informal) .....	..	..	..	..	..	..	..	..
Dwellinghouses Rendered Fit (Statutory) .....	..	..	..	..	..	..	..	..
Overcrowding—								
A. New Cases .....	..	..	..	..	..	..	..	129
B. Rehoused (By Corporation).....	..	..	..	..	..	..	..	453
C. Rehoused (Privately) .....	..	..	..	..	..	..	..	946
Rent Book Amendments (P.Nos. etc.) ..	..	..	..	..	..	..	..	58
SERVICE OF NOTICES.	INFORMAL.				STATUTORY.			
	(VERBAL)		(WRITTEN)					
	SERVED.	COMPLIED WITH.	SERVED.	COMPLIED WITH.	SERVED.		COMPLIED WITH.	
Public Health Act.....	133	159	2414	1520	3507		3315	
Housing Act (General) .....	..	..	5	..	..		..
Housing Act (Overcrowding) .....	..	..	1	..	..		..
Shops Act, 1950 (Sec. 38)	2	2	5	6	10		5	
Food and Drugs Act, 1938	80	74	71	123	42		33	
Corporation Acts and Regulations	30	36	578	420	28		49	
Tenement Bye-laws—Owner .....	..	..	12	9	95		12	
Occupier .....	..	..	4	9	1		..	
TOTALS	245	271	3090	2087	3683		3414	

NUISANCES.

The types of nuisances dealt with during the year were again largely similar except in one instance to those dealt with in previous years. Whilst the great majority of these demanded expert attention and official action for their abatement, many others which came under official notice and action should not have occurred if reasonable care by the persons responsible had been exercised, if elementary sanitary precautions had been taken by them, and if a "couldn't care less" attitude on the matter had not been adopted.

A serious nuisance caused by the deposit of a fine grey dust over a large area in the west end of the City, emitted from the chimneys of a large industrial premises situate just outside of the City commenced in October, 1951. This nuisance has continued throughout the year in greater or lesser degrees. Whilst improvements to the Electrostatic Grit Arrestors (fixed on 2 only of the 6 chimneys concerned) were carried out during the year and are now, after test, functioning to their guaranteed efficiency, the nuisance still prevails. The emission of grit from the other 4 chimneys needs much more effective control and this matter is now under consideration between the firm and the Health Committee.

The total number of nuisances dealt with was 7,612, being 1,296 less than the previous year.

Notices Served.

Whilst the total number of nuisances dealt with was less than the previous year the total number of documents of all types sent out in respect of them was very slightly less than last year. They comprised 3,335 informal, 3,683 formal notices, 1,296 summons letters, 3,865 circular and 1,760 other letters, a total of 13,939 as against 14,094.

Pail Closets, Privies, etc.

The absence of convenient sewerage facilities prevents the substitution by water closets of the existing Pail Closets, Ashpits, etc., in the City. Structurally, all of these are in a reasonably sound state and are mostly situated in the semi-rural outskirts of the City.

NEWCASTLE CORPORATION (GENERAL POWERS) ACT, 1935.

The Medical Officer of Health and the Chief Sanitary Inspector are empowered under the above Act to deal with defective and/or choked drains, conveniences, soil-pipes and waste-pipes from baths, sinks, etc., by service of a 24-hour' notice. On default of an owner

or occupier, as the case may be, the works required by the notice may be carried out and the costs recovered. In all, these very useful powers have been used in the service of 560 notices, and in 50 instances the specified works costing £127 1s. 9d. were carried out when default was made.

Atmospheric Pollution.

The total deposit of Aerial Sewage on the City over the year was 3,973 tons, an increase of 328 tons over last year's deposit. The Sulphur Dioxide content of the air showed an average daily mean concentration of 0.076 parts per million as against 0.09 last year. The highest concentration occurring was 0.21 and the lowest 0.01, whilst during the previous year, the concentrations were 0.32 and 0.01 respectively.

To ascertain the deposit on the City and the sulphur dioxide content of the air, six stations are in operation in the City, where at each is cited a deposit gauge and sulphur dioxide recorder. In addition, sulphation is measured at a station in Dean Street. Smoke observations on chimneys other than domestic ones were carried out as a routine measure, and where and whenever smoke was found to be emitted in such quantity so as to be deemed a nuisance, the cause was at once investigated and appropriate action followed. A similar action was also taken where other emanations into the air were detected. Advice to the management of firms on the prevention of smoke nuisances and talks of a practical nature to stokers on their work were given, and whilst much success has followed these efforts, the deposit over the City does not decrease. As a further means towards a cleaner atmosphere, it is hoped in the near future to establish a "Smokeless Zone in the City", i.e., an area or zone wherein it would be illegal for a chimney on any type of premises to emit smoke. Before such a zone could be established, however, additional powers are needed, and these powers may only be secured by the promotion of a local bill. On the establishment of an initial smokeless zone, others would be formed adjoining it or elsewhere in the City and in due course all of them would be merged into one, and the City would thus become a smokeless zone. A smokeless zone is a practical proposition, and has proved of material value in reducing atmospheric pollution already in two other cities in the country where they are now firmly established. The experience gained by the local authorities concerned is such that additional smokeless zones are now to be promoted.

In the meantime, as Tyneside must be regarded as one area in the matter of control of atmospheric pollution, a common policy should be operated by one controlling authority rather than the present arrangement whereby each Tyneside local authority acts independently of the other, otherwise "a clean atmosphere", which is possible to secure, is indeed far ahead.

During the year 456 observations were carried out on chimneys of business premises. Nuisances were detected on 27 occasions and 19 informal notices were served on the firms concerned.

RESULTS FROM OPERATION OF SIX GAUGES IN THE CITY.

Site of Gauge.	Average Deposit.	RAINFALL (inches).	ENGLISH TONS OF DEPOSIT PER SQUARE MILE							
			Insoluble Matter.			Soluble Matter.	TOTAL SOLIDS.	Included in Soluble Matter		
			Tar.	Other Combustible	Ash.			Sulphate as SO ₄	Chlorine as Cl.	Lime as Ca.
Kenton Hall	Month . Annum	1·803 21·64	0·187 2·24	2·883 34·60	6·666 80·000	5·414 64·97	15·150 181·81	1·471 17·65	0·856 10·27	0·473 5·68
Westgate Cemetery	Month . Annum	2·042 24·50	0·166 1·99	6·205 74·46	13·580 162·96	8·666 104·00	28·617 343·41	3·019 36·23	1·192 14·31	0·628 7·54
Welbeck Reservoir	Month . Annum	1·58 18·97	0·18 2·17	2·827 33·93	6·437 77·25	5·913 70·96	15·359 184·31	1·554 18·65	1·077 12·93	0·52 6·24
Benwell Reservoir	Month . Annum	1·092 13·12	0·28 3·36	3·364 40·36	11·456 137·48	6·288 75·48	21·388 256·68	2·264 27·2	0·776 9·32	0·264 3·20
Wingrove Road	Month . Annum	1·697 20·37	0·19 2·28	3·966 47·60	9·189 110·27	6·838 82·06	20·184 242·21	1·641 19·70	0·898 10·78	0·50 6·00
Stotts Road	Month . Annum.	1·512 15·12	0·194 1·94	3·118 31·18	5·06 50·67	4·705 47·05	13·084 130·84	1·216 12·16	0·788 7·88	0·413 4·13
Average per Gauge	Month . Annum	1·579 18·953	0·199 2·33	3·727 43·688	8·732 103·105	6·304 74·086	18·963 223·21	1·861 21·931	0·931 10·915	0·466 5·465
			TOTAL DEPOSIT ON THE CITY DURING 1953.							
	Month Annum.		3·542 41·48	66·33 777·6	155·4 1835·2	112·2 1318·7	337·5 3973·1	33·12 390·3	16·57 194·2	8·294 97·27

Offensive Trades.

The offensive trades carried on are as scheduled under the Public Health Act, 1936.

Throughout the year 53 inspections of these trade premises were made and whilst offences were found none were of a serious nature and generally the businesses have been carried out in a satisfactory manner.

The number and types of offensive trades on the register is :—

Rag and Bone Dealers	8	Fat Melters	2
Tripe Boilers	5	Glue Makers	2
Gut Scrapers	2	Soap Boilers	1
Dealers in Hides and Skins	2	Blood Boilers	2
Bone Boilers	2	Fish Curing	1
Total		27	

PLACES OF PUBLIC ENTERTAINMENT.

Theatres, Cinemas, etc.

In every place of public entertainment, attention is paid to the suitability and sufficiency of the amenities provided for the patrons and staffs, together with the sufficiency and suitability of means of ventilation, heating, lighting of the premises, and their state of cleanliness, etc. With regard to this type of premise when an application is made to the Licensing Magistrates for a licence for music and/or dancing, a Certificate of Sanitation from the Sanitary Authority must be produced in support of the application. Six such applications were received, and after inspection of the premises, a certificate was granted to each.

The total number of premises in respect of which Certificates of Sanitation have been issued is 177, comprising 6 theatres and music halls, 36 cinemas, and 135 dancing and concert halls, billiard rooms and cafes.

The number of inspections (day and evening) of all these premises carried out during the year was 582 and sanitary conditions were found to be reasonably satisfactory.

HOUSING.

The Housing Act, 1936.

The number of inspections carried out during the year totalled 1,376.

Section 11.

4 houses, in a structural state beyond any reasonable repair, were represented to the Health Committee as being totally unfit for human habitation. Demolition orders were subsequently made by the City Council in each instance and the houses, upon the tenants being re-

housed by the Housing Department, were demolished. 4 other houses not so far advanced in structural decay were similarly represented. One of them was closed for further habitation and action was cancelled in respect of the other three on their acquisition by the City Council.

Section 51.

No applications were received for the certification of improvements to dwellinghouses.

Section 57—Abatement of Overcrowding.

The total number of families re-housed by the Housing Department from overcrowded dwellings into houses suitable for their needs was 1,399, with a population of 5,596. Last year 946 families, population 4,730, were so re-housed.

Application for Council Houses.

The Medical Officer of Health and Chief Sanitary Inspector, with the approval of the Housing and Health Committees, deal with applications for Council Houses where the conditions are such that their special knowledge should be used to bridge the gap between the "Points Scheme" of the Housing Committee and other matters that are so difficult to assess satisfactorily with so many points.

697 applications (40 less than last year's total) were received during the year, and after investigation and careful consideration were classified into four groups and appropriate recommendations submitted to the Housing Department. Re-housing was effected in 460 cases.

The majority of the applications were received direct from the applicants, the others being from the Medical Profession and other interested sources.

Section 62.

Under this section the "permitted number", i.e., the number of persons who may normally sleep in a dwellinghouse without causing illegal overcrowding is issuable by the Health Committee. During the year 58 such numbers were supplied to applicants after inspection and measurement of the rooms.

Tenemented Houses.

During the year 52 tenemented houses (171 holdings) were removed from the register.

The number of such houses on the register at the end of the year was 1,376 with 4,030 holdings therein, as follows : one-roomed holdings, 997 ; two-roomed holdings, 2,471 ; three-roomed holdings, 504 ; four-roomed holdings, 51 ; five-roomed holdings, 7 ; Total 4,030.

Inspections carried out of these houses numbered 2,803.

Slum Clearance (Demolition).

39 dwellinghouses, condemned under pre-war Slum Clearance Orders, which had become empty, derelict and/or in a dangerous state, were demolished.

Tents, Vans, Sheds and Similar Structures.

There are no tents, vans, sheds or similar structures occupied as permanent dwellings in the City.

Common Lodging Houses.

The condition of the two Common Lodging Houses on the register at the beginning of the year came under enquiry, and resulting from this, the registered keepers were requested by the Health Committee to carry out moderate but essential works of improvements to the houses. One keeper was unable to afford the costs of the required work and after all reasonable assistance had been afforded to him by the Health Committee his application for registration and also that of the house (originally registered in 1905 for 30 male lodgers) was refused.

In the instance of the other house, the works required were nearing satisfactory completion at the end of the year. The accommodation in the remaining house is for 58 male lodgers, and throughout the year it has been fully occupied.

During the period when the 2 houses were available the accommodation was for 88 beds (all single male lodgers). The highest nightly demand for beds was 81, the lowest 78, and the average 81.

New Buildings and Sanitary Alterations.

194 plans were received from the Town Improvement and Streets Committee for examination. Improvements on the proposals, where necessary, were suggested on their return. The number of plans submitted last year was 158.

DISINFESTATION.

Eradication of Bed Bugs, Black Beetles, etc.

Re-housing.

Whenever an incoming tenant of a new or a vacated Council house has lived in a verminous or query verminous house the rooms to be vacated, together with his goods and chattels, are thoroughly treated with an insecticide and soft goods (bedding, etc.) steam disinfected before removal to his new house.

Council and Private Houses.

When private houses are found verminous, then, in accordance with the degree of infestation, the wood mouldings, skirtings, wall coverings, etc., are removed and the rooms and contents therein treated with a liquid and/or powder insecticide. Mattresses and other soft goods are removed where necessary and disinfected by steam. Rooms are then thoroughly cleansed and re-decorated.

In Council Estate houses, all disinfestation work is carried out by the City Architect (apart from steam disinfestation) and when houses are found to be infested the foregoing procedure is carried out. Before replacement of woodwork it is well coated on the back side with creosote or other preservative. After cleansing and re-decoration of the rooms, further treatment with insecticide is given and observation kept on the houses.

Insecticides in use are Zaldecide, Gammexane, D. Solution, Lowes' Deodex, etc., in liquid, powder and fume form. Re-infestation has rarely been found.

The number of premises found to be verminous and dealt with is as follows: Council Houses, 28; Private Houses, 356; Other Premises, 16.

FACTORIES ACT, 1937.

Factories, manual or non-manual, come within the jurisdiction of the Health Committee. In the latter group powers are, to some extent, restricted.

The matters that receive attention are in respect of overcrowding, ventilation, heating, the provision of water supplies, washing facilities, sanitary accommodation, the handling, preparation and storage of food, and a host of others of a hygienic nature.

During the year 4,437 inspections were made, including inspections under the Food and Drugs Act and Rag Flock and Other Filling Materials Act.

Outworkers.

A list of outworkers (persons carrying out work of scheduled trades in their own homes or other premises on behalf of a factory) must be submitted in February and August each year to the Local Authority by the occupiers of factories. 13 lists were so received, and 25 inspections were carried out on outworkers' premises.

H.M. Inspector of Factories notifies a Local Authority of any matters under their jurisdiction which have come to his notice during his inspections. 42 such notices were so received and all were attended to, the action taken in each instance being reported to H.M. Inspector as required by the Act.

Administration of the Factories Act, 1937.

Home Office Tables.

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH.

PREMISES.	NUMBER OF		
	Inspec- tions.	Written Notices.	Occupiers Prosecuted
(1)	(2)	(3)	(4)
Factories with mechanical power	2,283	124	—
Factories without mechanical power.....	629	33	—
Other Premises under the Act (including works of building and engineering con- struction but not including outworkers' premises)	66	1	—
Total.....	2,978	158	—

2.—DEFECTS FOUND.

Particulars. (1)	NUMBER OF DEFECTS.			Number of defects in respect of which Prosecutions were instituted. (5)
	Found. (2)	Re-medied. (3)	Referred by H.M. In-spector. (4)	
Want of cleanliness (S.1)	91	79	3	} None
Overcrowding (S.2)	1	1	—	
Unreasonable temperature (S.3)	2	2	—	
Inadequate ventilation (S.4)	2	2	—	
Ineffective drainage of floors (S.6)	2	1	—	
Sanitary } insufficient	35	30	5	
Convenience } unsuitable or defective ...	126	69	11	
ces (S.7) } not separate for sexes.....	7	5	—	
Other Offences	80	49	1	
(Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937.)				
Total	246	238	20	—

OUTWORK IN UNWHOLESOME PREMISES.

(Factories Act, 1937; Section 110).

NATURE OF WORK.	No. of Outworkers	No. of cases of default in sending Lists to the Council.	Prosecutions.
Making Wearing Apparel.....	15	—	None
Paper Bag Making	7	—	None
Total	22	—	None

Workplaces.

Workplaces, wherein is carried out all manner of business and trades, are dealt with under the Public Health Act, 1936, and other Acts. Of these premises 835 inspections were made and the following defects found and dealt with :—

Want of cleanliness	16
Sanitary accommodation insufficient or defective	19
Other nuisances	9
Total	44

LIST OF TRADES.

Group.	TRADES.	NUMBER OF	
		FACTORIES (Factories Act, 1937).	WORKPLACES (Public Health Act, 1936).
1	Athletic Outfitters (comprises : the making and repairing of bats, rackets, guns, cycles, billiard tables, golf clubs, etc.)	16	—
2	Bakehouses	157	—
3	Food (comprises : bacon-curing, rolling and smoking, packing of vegetables, fruits, canned goods, ice cream, fish-curing and smoking, sauce and pickles, tripe-boiling, jam making, sugar boilers, egg-sorters, wholesale fish dealers, sausage makers, potato stores, etc.)	257	103
4	Laundries	23	—
5	Metal workers (comprises : blacksmiths, whitesmiths, coppersmiths, locksmiths, tin-smiths, brass-finishers ; motor, electrical and general engineers, wireworkers, sheet metal workers, car-breakers, plumbers, engravers, millwrights, etc.)	518	53
6	Restaurant kitchens (including hotels, cafes, dining rooms, snack bars, works canteens, and community food supply centres)	—	272
7	Wood workers (comprises : saw mills, joiners, cabinet-makers, wood carvers, picture framers, undertakers ; boat builders and repairers, ladder makers, coopers, toy makers, boxmakers, etc.)	201	27
8	Wearing apparel (comprises : dressmakers, milliners, costumiers, mantle and gown makers, underclothing, bed linen, furriers, shirt makers, tailors, etc.)	208	44
9	Workers in leather (comprises : bootmakers and repairers, bookbinders, bag and trunk makers, belt makers, harness and saddlery, etc.)	101	23
10	Watchmaking and jewellery (comprises : watchmakers, opticians, instrument makers, etc.)	67	6
11	Miscellaneous trades (comprises : transport workers, hide and skin dealers, hay and corn dealers, marine stores, scrap metal works, timber yards, grease and oil stores, bottle washers, photographers, painters and decorators, bouquet and wreath makers, soap boilers, wholesale chemists, cosmetic makers and packers, etc.)	511	411
	TOTAL	2,059	939

Council and other Schools.

71 inspections were made of schools in the City. Defects of a minor nature were found on occasions, which were promptly remedied after verbal request to the Education Authority.

Shops Act, 1950 : Section 38.

Inspections totalling 651 were made. 204 contraventions (none of a serious nature) were found and dealt with. Details of these inspections are embodied in the "Summary of Inspections" table on page 121B.

Pet Animals Act, 1951.

Premises on which pets are dealt with must be in a suitable state for this purpose and are licensed annually. During the year, 28 licences were applied for and issued, all of them being in respect of premises licensed the previous year. 60 inspections of the premises were made, when conditions found were satisfactory.

A prosecution was instituted against a person who was found selling puppies on the street. Conviction followed and he was fined £1.

The type of premises and pets dealt with are as follows :—

SHOP PREMISES (18 Licences)—Budgerigars, Canaries, Parrots, Tropical Fish, Rabbits, Tortoises, Puppies, Reptiles and Mice.

COVERED MARKET (9 Licences)—Dogs, Cats, Chicks, Goldfish, Budgerigars, Canaries, Pigeons, Pullets.

OPEN MARKET (1 Licence)—Budgerigars, Goldfish, Canaries, Parrots, Tortoises.

Rag Flock and Other Filling Materials Act, 1951.

This Act prescribes the filling materials to be used in the making of bedding, soft goods and other forms of upholstery. It also sets out a standard of cleanliness for each of the prescribed filling materials, and in addition, the premises whereon the specified works are carried out must be registered. Further, where Rag Flock is made or stored for distribution to registered premises, such premises must be licensed for this particular purpose.

In all, 31 premises are so registered, of which 2 are licensed for the storage and distribution of Rag Flock.

70 inspections were carried out during the year, and on each visit, the requirements of the Act were found to be complied with.

26 samples of filling material were taken and submitted to the Prescribed Analyst, of which 3 (one informal and two formal) were

not in compliance with the standard of cleanliness. The informal sample was a feather pillow submitted to the Department by way of complaint in which the feathers were found to contain an excess of impurities. A formal sample of feathers was then taken from the manufacturer of the pillow and after analysis found to be satisfactory. Another sample of feathers was found to contain an excess of impurities (a border line case) and on taking a check sample from the firm concerned it was found to be satisfactory. A sample of cotton felt taken from a new consignment was found to have an excess of trash. The wholesaler from whom the sample was obtained held up all the consignment pending the result of the analysis, and on being notified of the result the whole consignment was returned to the makers.

SAMPLES.

Rag Flock	12
Cotton Flock	1
Cotton Felt	3
Woollen Felt	3
Feathers.....	5
Coir Fibre	2
	—
Total	26
	—

Fertilisers and Feeding Stuffs Act, 1926.

Apart from the control exercised under other enactments over the premises dealing with Fertilisers and Feeding Stuffs, 52 inspections were made under the above Act. 19 samples (11 of fertilisers and 8 of feeding stuffs) all formal were taken and submitted to the Agricultural Analyst. 16 samples satisfied the requirements of the Act. As to the deficient samples, one of fertiliser (Steamed Bone Flour) was found to have a nitrogen content higher than that declared and which was above the limit of variation allowed. Another sample (Meat Protein) contained an excess of oil and phosphoric acid, and in the other (Sterilised Feeding Bone Flour) albuminoids was in excess. Whilst the Agricultural Analyst was of opinion that the 3 samples were not to the prejudice of the purchaser, the facts, together with details of the other analysis, were submitted to the Ministry of Agriculture and Fisheries for their attention.

Agricultural Produce (Grading and Marking) Acts, 1928, 1931.

4 premises are registered for the cold storage and chemical storage of eggs. During the year no eggs were found in storage. Inspection (included under Food Premises) was carried out on the registered premises and no contraventions of the Act were found.

Merchandise Marks Acts, 1926-1953.

236 inspections of shops, stalls, hawkers, etc., were carried out to ensure that imported articles of foodstuffs were marked with an indication of origin as required by the Act. Much ignorance of this responsibility was found amidst the persons selling the foodstuffs and printed notices were therefore sent out to all concerned. Great improvement in the "notice as to origin of foodstuffs" was found on subsequent visits.

A common offence found was the labelling of "Channel Island" and "Canary Island" tomatoes as "English".

Pharmacy & Poisons Acts, 1933-1941—Listed Sellers of Part II Poisons.

Poisons scheduled under the Poisons List Part II may be sold on many types of premises subject to their suitability and being registered for the purpose.

Generally in the Food Shops, the poisons sold are in the form of sealed bottles of disinfectants, and much care is exercised so that such premises are kept, not only in conformity with the Act, but also with other lawful requirements.

During the year, one premise was registered and 7 others ceased to sell a listed poison, leaving a total of 162 (6 less than last year) premises on the register at the end of the year.

233 inspections of these premises were made and generally conditions found were satisfactory. The only action found necessary was "verbal cautions" in instances where storage of the sealed bottles of disinfectant was somewhat too near articles of foodstuffs.

Prevention of Damage by Pests Act, 1949.

The administration of the above Act is delegated to the Veterinary Officer. Close co-operation in its operation is, however, exercised with him and during the year many inspections of infested premises were carried out. Altogether, 110 tests were applied to drainage systems; works of reconstruction followed in many instances, and other control measures were supervised.

Exhumations.

Four exhumations and re-interments authorised by Home Office Licences were supervised during the year. The operations were carried out in the early morning in a reverent and sanitary manner and in full compliance with the conditions set out in the licences.

Staff Changes.

The loss of experienced personnel has again occurred this year. Last year two officers secured more remunerative appointments with other local authorities, and another retired on pension.

This year two officers, Inspectors S. Trewhitt and A. Barker, resigned their appointments upon taking up similar duties with other local authorities.

Vacancies on the staff were filled by the appointment of W. J. Birkett (2 $\frac{1}{4}$ years' experience with another local authority) and Messrs. G. Hall and T. McCowie, who were without any experience other than that as a "Student Sanitary Inspector".

At the end of the year the Inspectorial Staff was 7 short of establishment.

Conclusion.

Newcomers to the Inspectorial Staff have been willingly and wisely counselled at all times by their experienced colleagues. The Clerical Staff have also worked wholeheartedly and in very close co-operation with the Inspectorial Staff, and this tight combination of teams has been, in the main, the means whereby the good results of the year's work have been obtained. To each and all a sincere acknowledgment of their excellent efforts is made.

To yourself and the Health Committee, I would express my grateful thanks for the kindly actions and support which have been so freely given to me throughout the year.

W. GRAY,

Chief Sanitary Inspector.

INCLUDING REPORTS OF
DISEASES OF ANIMALS AND
INSPECTION OF MEAT AND OTHER FOODS.

VI—VETERINARY OFFICER.

ANIMALS SLAUGHTERED, CARCASES CONDEMNED,
RATS AND MICE DESTROYED.

REPORT OF THE VETERINARY OFFICER
for the Year 1953.

To the Medical Officer of Health.

SIR,

I have pleasure in submitting the following Report for the year 1953.

DISEASES OF ANIMALS.

Diseases of Animals Act, 1950.

During the year 1953, no outbreaks of scheduled disease occurred amongst the animals within the City, and none during the previous year.

Foot and Mouth Disease.

No case of foot and mouth disease occurred within the City during the year, but in consequence of an outbreak of the disease at Ryton, Co. Durham, in January, an Infected Area which included the City and County of Newcastle upon Tyne was declared by the Ministry of Agriculture and Fisheries. No movement of animals out of this area was permitted, and movement of animals into and within the area was controlled by licence, only necessary movements being permitted. As gatherings of animals at Collecting Centres authorised by the Minister of Food for the reception of animals for immediate slaughter were permitted to be held by licence granted by local authorities, under the Foot and Mouth Disease (Infected Areas Restrictions) Order of 1938, the Collecting Centre at the Cattle Market within the City was accordingly licensed and continued to function throughout the restrictions. During the operation of the restrictions 471 movement licences were granted.

Within Great Britain there were 40 outbreaks of the disease during the year, necessitating the slaughter of 7,751 animals, compared with 495 outbreaks during the previous year, in which 75,454 animals were slaughtered.

Tuberculosis.

During the year no animals were dealt with under the Tuberculosis Order of 1938.

Anthrax.

The City was completely free of Anthrax during the year under report, microscopic examinations of blood smears from the carcasses of 7 animals found in the City slaughterhouses all proving negative.

Within Great Britain 609 outbreaks were confirmed, 641 animals being attacked by the disease, compared with 1,215 outbreaks during the previous year, involving 1,347 animals.

Swine Fever.

During the year under report, no outbreak of swine fever occurred within the City.

Within Great Britain during the year, 2,713 outbreaks occurred, 705 swine being slaughtered, compared with 891 outbreaks during the previous year, in which 2,713 swine were slaughtered.

Visits were made to piggeries in connection with swine movements under the Regulation of Movement of Swine Orders of 1950, and also in connection with certain requirements under the Foot and Mouth Disease (Packing Materials) Orders of 1925-26, the Diseases of Animals (Boiling of Animal Foodstuffs) Order of 1947, and the Movement of Animals (Records) Order of 1925.

Rabies.

Great Britain is still free from this disease and has been so since 1922.

Parasitic Mange.

No outbreak of this disease occurred within the City nor in any other part of Great Britain during the year.

Fowl Pest.

During the year no outbreaks of this disease occurred within the City. Within Great Britain an increase in the number of outbreaks was reported, there being 978, as compared with 498 during 1952.

Railway Cattle and Horse Docks, Live Stock, Markets, Lairs and Horse Sales.

For the purpose of the Transit of Animals Orders of 1927 to 1947, 206 visits were made to the Collecting Centre at the Cattle Market and the railway cattle docks during the year. The cleansing and disinfection were found to have been carried out efficiently. One calf, eight sheep, three pigs and one horse were found dead at the railway cattle docks and, after inspection permission was granted for their removal for destruction.

NUMBER OF VISITS AND INSPECTIONS OF PREMISES DURING THE YEAR 1953.

Railway Cattle Docks.	Collecting Centre, Cattle Market.	Piggeries.	Transport Wagons & Records Books.	Poultry Market.
68	138	18	240	24

OUTBREAKS OF SCHEDULED DISEASES WITHIN THE CITY.

	ANTHRAX.			SWINE FEVER		FOOT AND MOUTH DISEASE.							PARASITIC MANGE.		TUBERCULOSIS. DAIRY COWS SLAUGHTERED.
	Number of Outbreaks.	Diseased Animals.	Diseased Carcasses.	Number of Outbreaks.	Number Diseased, Dead or Slaughtered, Exposed to Infection.	NUMBER OF OUTBREAKS.				ANIMALS DISEASED.			Number of Outbreaks.	Number of Horses found diseased.	
						Cattle Lairs.	Pig Lairs.	Slaughterhouses.	Registered Cowsheds.	Farms.	Cattle.	Sheep.				Pigs.	Beef.	Pork.
*1934...	1	2	1	1	5	.	.	.	.	.	.	.	.	.	5
1935...	1	2	1	1	38	.	.	.	.	.	.	.	.	.	6
1936...						.	.	.	.	.	.	.	.	.	6
1937...						.	.	.	.	.	.	.	.	.	4
1938...						.	.	.	.	.	.	.	.	.	4
1939...	2	1	2	2	205	.	.	.	.	.	.	.	.	.	.
1940...	2	1	2	4	336	.	.	.	.	.	.	.	.	.	.
1941...						.	.	.	.	.	.	.	.	.	6
1942...						.	.	.	.	.	.	.	.	.	8
1943...						.	.	.	.	.	.	.	.	.	8
1944...						.	.	.	.	.	.	.	.	.	18
1945...						.	.	.	.	.	.	.	.	.	8
1946...	1		1			.	.	.	.	.	.	.	.	.	7
1947...						.	.	.	.	.	.	.	.	.	4
1948...						.	.	.	.	.	.	.	.	.	2
1949...						.	.	.	.	.	.	.	.	.	.
1950...						.	.	.	.	.	.	.	.	.	1
1951...				1	2	.	.	.	.	.	.	.	.	.	1
1952...						.	.	.	.	.	.	.	.	.	.
1953...						.	.	.	.	.	.	.	.	.	.

*Years prior to 1934 are given in previous Annual Reports.

LIVESTOCK EXHIBITED WITHIN THE NEWCASTLE CATTLE MARKET.

The Cattle Market, which ceased to function as such on the 15th January, 1940, has again operated throughout the year as a Collecting Centre. The number of animals passing through the Centre during the year was 22,915, including 4,456 cattle, 282 calves, 14,235 sheep and 3,942 swine, and an ante-mortem inspection of these was carried out prior to the animals being graded and allocated to the Government Slaughterhouses.

NUMBER OF ANIMALS EXHIBITED WITHIN THE NEWCASTLE CATTLE MARKET.

Year.	Cattle.	Calves.	Sheep.	Swine.	* Dairy Cows.
1934	40,521	2,606	250,211	11,681	245
1935	43,261	3,002	239,860	17,270	257
1936	45,220	2,781	243,687	18,293	253
1937	42,207	1,769	197,524	14,974	218
1938	41,189	1,572	254,171	17,285	163
1939	43,878	1,589	252,782	12,341	117
†1940	7,953	508	27,371	6,449	..
1941	5,434	446	15,428	5,993	..
1942	5,094	555	14,028	4,443	..
1943	4,958	529	12,214	4,762	..
1944	5,843	375	14,205	4,688	..
1945	6,807	485	16,498	4,554	..
1946	6,565	437	18,485	3,562	..
1947	5,406	375	11,941	2,243	..
1948	6,034	399	17,433	2,453	..
1949	5,761	361	19,620	4,581	..
1950	5,322	315	14,237	5,220	..
1951	5,250	372	13,226	5,254	..
1952	4,259	306	13,470	4,919	..
1953	4,456	282	14,235	3,942	..

* Milch Cows sold on Fridays within the Cattle Market lairs.

† Market used as a collecting centre by the Ministry of Food as from 15th January.

INSPECTION OF MEAT AND OTHER FOODS.

Animals Slaughtered within the City.

The slaughter of animals for human consumption is still controlled by the Ministry of Food under emergency powers, the object of which was to give the basis of a sound rationing scheme. As pointed out in previous Reports, concentration of slaughter, resulting from these measures, has given the Local Authority inspectors the opportunity of examining the carcasses and offals of all animals slaughtered, thus ensuring for the public a disease-free meat supply. It is hoped, therefore, that when control is ended, or whatever measures may be substituted, we will not return to the use of the numerous private slaughterhouses as existed in 1939, and it is in this respect that the erection of a modern public abattoir at an early date is most desirable.

ANIMALS SLAUGHTERED ON LICENSED PREMISES WITHIN THE CITY.

	YEAR.				
	1953	1952	1951	1950	1949
Cattle	*31,069	31,888	32,851	33,053	28,313
Calves	3,536	5,271	7,777	7,680	6,513
Sheep	139,666	127,763	101,973	125,536	112,449
Pigs	21,848	19,832	8,858	4,317	2,725
Horses	1,064	1,390	1,907	1,666	2,641
Total Animals.	197,183	186,144	153,366	172,252	152,641

* Includes 3,608 cows, 27,199 young cattle (heifers and bullocks) and 262 bulls.

Animals found Tuberculous on Routine Slaughterhouse Inspection.

In the course of meat inspection within the City during the year, 3,702 animal carcasses were found to be affected with tuberculosis, a decrease of 25·97 per cent. as compared with the previous year. It was found necessary to destroy the entire carcasses and offals of 223 animals, owing to the extent and distribution of the disease, whilst in 3,479 cases some part of the carcass or internal organs were destroyed.

CARCASSES INSPECTED AND WHOLLY OR PARTIALLY CONDEMNED.

	Cattle, exclud- ing Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed	27,461	3,608	3,536	139,666	21,848
Number inspected	27,461	3,608	3,536	139,666	21,848
<i>All diseases except Tuberculosis :</i>					
Whole carcasses condemned ..	29	57	120	285	163
Carcasses of which some part or organ was condemned .	7,225	2,669	7	4,901	1,424
Percentage of the number inspected affected with diseases other than Tuber- culosis	26·41	75·55	3·59	3·71	7·26
<i>Tuberculosis only :</i>					
Whole carcasses condemned .	75	99	3	..	46
Carcasses of which some part or organ was condemned ..	1,844	974	..	..	661
Percentage of the number inspected affected with Tuberculosis	6·90	29·73	·084	..	3·23

NUMBER OF DISEASED ORGANS CONDEMNED.

HEADS (including Tongues)—	Bovine.	Swine.	Sheep.	Total.
Tuberculosis	1,149 (125)	551 (1,248)	— (—)	1,700 (1,373)
Other conditions	83 (41)	4 (—)	11 (—)	98 (14)
LUNGS—				
Tuberculosis	2,528 (369)	84 (14)	— (—)	2,612 (383)
Other conditions	2,603 (72)	564 (213)	2,458 (37)	5,625 (322)
HEARTS—				
Tuberculosis	287 (31)	— (—)	— (—)	287 (31)
Other conditions	70 (1)	506 (—)	75 (—)	651 (—)
LIVERS—				
Tuberculosis	267 (175)	14 (—)	— (—)	281 (175)
Other conditions	8,252 (785) & 35,330 lbs.	545 (80)	2,740 (111) & 14 lbs.	11,537 (976) & 35,344 lbs.
PLUCKS—				
Tuberculosis	— (—)	514 (83)	— (—)	514 (83)
Other conditions	5 (—)	760 (45)	1,713 (30)	2,478 (75)
UDDERS—				
Tuberculosis	9 (—)	— (—)	— (—)	9 (—)
Other conditions	1,303 (—)	— (—)	— (—)	1,303 (—)
THICK SKIRTS—				
Tuberculosis	368 (—)	— (—)	— (—)	368 (—)
Other conditions	168 (—)	— (—)	— (—)	168 (—)
SPLEENS—				
Tuberculosis	270 (—)	— (—)	— (—)	270 (—)
Other conditions	505 (—)	— (—)	— (—)	505 (—)
STOMACHS, MESEN- TERIES & INTESTINES—				
Tuberculosis	584 (24)	53 (—)	— (—)	637 (24)
Other conditions	427 (—)	48 (239)	19 (—)	494 (239)

NOTE.—The figures in brackets indicate condemnations during 1939, *i.e.*, the year prior to the introduction of centralised slaughtering. The increased condemnations during the war years and in 1953 may be attributed entirely to the fact that centralised slaughtering rendered possible the post-mortem inspection of 100 per cent. of the animals slaughtered within the City.

The table does not include organs condemned for decomposition and contamination.

	Carcases, etc.					Lungs.			Hearts.		
	Beef.	Veal.	Mutton.	Pork.	Horse.	Sets Ox.	Sets Sheep.	Sets Pigs.	Ox.	Sheep.	Pig.
Tuberculosis	174 + 12,992 lbs.	3	..	46½ + 51 lbs.	..	2528	..	84	287	..	..
Johne's Disease with Emaciation	18	..	..	..	..	..	..	..	..	..	..
Johne's Disease .....	..	..	..	..	..	..	..	..	..	..	..
Swine Erysipelas .....	..	..	..	13	..	..	..	..	..	..	..
Salmonellosis	1	..	..	..	..	..	..	..	..	..	..
Necrosis	132 lbs.	..	..	..	..	..	..	..	..	..	..
Actinobacillosis .....	..	..	..	..	..	..	..	..	..	..	..
Actinomycosis .....	..	..	..	..	..	..	..	..	..	..	..
Pyrexia	1	..	1	5	..	..	..	..	..	..	..
Pyæmia	2	2	15	61	..	..	..	..	..	..	..
Pericarditis .....	..	..	..	..	..	..	..	..	34	..	17
Septic Conditions	33 + 1,655 lbs.	6	31 + 1,296 lbs.	28 + 983 lbs.	..	9	3	..	1	2	..
Toxæmia	15	2	5	10	..	..	..	..	..	..	..
Jaundice .....	..	9	2	8	..	..	..	..	..	..	..
Uræmia	2	..	..	..	..	..	..	..	..	..	..
Enteritis .....	..	..	..	..	..	..	..	..	..	..	..
Tumours	1	..	2	1	..	..	..	..	..	..	..
Lymphatic Leukæmia .....	..	..	1	..	..	..	..	..	..	..	..
Pneumonia .....	..	..	..	..	..	14	7	247	..	..	..
Pleurisy	2,773 lbs.	..	13 + 645 lbs.	14 lbs.	..	558	65	300	..	..	..
Pleurisy and Peritonitis ...	354 lbs.	..	1 + 16 lbs.	7 + 58 lbs.	..	..	..	..	..	..	..
Peritonitis	951 lbs.	..	125 lbs.	..	..	..	..	..	..	..	..
Mastitis .....	..	..	7 lbs.	20 lbs.	..	..	..	..	..	..	..
Cirrhosis .....	..	..	..	..	..	..	..	..	..	..	..
Cavernous Angioma .....	..	..	..	..	..	..	..	..	..	..	..
Oedema and Emaciation ..	10 + 16 lbs.	5	187	28	1	..	..	..	..	..	..
Parasites (Distomatosis, Cysts, &c.) .....	..	..	3 lbs.	..	..	2016	2383	17	1	..	..
Imperfect Bleeding, Congestion, &c.	2	1	3	5 + 24 lbs.	..	5	..	..	34	73	489
Melanosis	1 + 129 lbs.	..	..	38 lbs.	..	1	..	..	..	..	..
Urticaria .....	..	..	..	27 lbs.	..	..	..	..	..	..	..
Muscular Fibrosis	42 lbs.	..	..	9 lbs.	..	..	..	..	..	..	..
Immaturity .....	..	93	..	..	..	..	..	..	..	..	..
Osteohæmatochromatosis ..	127 lbs.	..	..	..	..	..	..	..	..	..	..
Arthritis	30 lbs.	..	..	1,339 lbs.	..	..	..	..	..	..	..
Traumatism	9,247 lbs.	57 lbs.	585 lbs.	2 + 1,474 lbs.	..	..	..	..	..	..	..
Abnormal Odour	52 lbs.	..	..	..	..	..	..	..	..	..	..
Moulds	89 lbs.	29 lbs.	384 lbs.	..	..	..	..	..	..	..	..
Decomposition	9,394 lbs.	5 lbs.	24 + 10 sides + 3,118 lbs.	2 + 8,950 lbs.	..	9	..	10	1	..	..
Contaminated	75 lbs.	2	29 lbs.	500 lbs.	..	9	..	..	4	..	..

[illegible]

**CARCASES OF BEEF CONDEMNED WITHIN THE CITY DURING THE
PAST TWENTY YEARS.**

Total Condemned.		Numbers condemned on account of Tuberculosis.	Percentage Tuberculous.
Year.	Carcases.	Carcases.	Per cent.
*1934	186	158	84.94
1935	182	159	87.35
1936	255	241	94.51
1937	231	208	90.04
1938	263	205	77.94
1939	278	237	88.25
1940	460	413	85.43
1941	450	400	88.88
1942	413	369	89.34
1943	494	413	83.60
1944	416	352	84.61
1945	415	380	91.56
1946	418	364	87.08
1947	361	291	80.60
1948	261	213	81.60
1949	335	264	78.80
1950	414	339	81.88
1951	448	314	70.08
1952	362	273	75.41
1953	260	174	66.92

* Years prior to 1934 are given in previous Annual Reports.

Public Health (Meat) Regulations of 1924.

Visits numbering 7,501 were made to meat and provision shops, restaurants, stalls, vehicles, etc., in the enforcement of the Regulations. A number of contraventions, relating chiefly to meat conveyed in dirty vehicles, and butchers' shops not kept in a cleanly condition, were found during these visits and cautions administered.

FOOD AND DRUG ACT, 1938.

Registration of Food Premises.

During the year, 13 applications for registration of butchers' shops to be used for the preparation or manufacture of sausages, potted meats, etc., were dealt with and approved by the Health Committee.

Imported Foodstuffs.

During the year routine visits were made to the Quayside, a percentage of the undermentioned meat foodstuffs, etc., from 80 of the vessels arriving from Denmark being examined :—

SALTED PIG OFFALS.

Casks—131 maws, 38 casings and 36 feet.

OTHER GOODS.

602,152 sides bacon, 93,140 cases tinned meats, 19 packages sausage and 3,022 sacks mussels.

The Merchandise Marks Act, 1926.

During the war, the Ministry of Food exercised emergency powers to suspend the Marking Orders relating to eggs, bacon, butter, dried fruit, meat and poultry, and by Directions made in May, 1950, under the 1926 Act those suspensions were continued (except for eggs) until 24th May, 1951. The Orders, as applied to bacon and ham, dead poultry, certain classes of chilled, frozen, boneless and salted meats and edible offals, and of salmon and sea trout, are administered by this Department, and they provide that such foodstuffs shall bear an indication of origin. A further object of these Orders is to ensure that the above foodstuffs shall be easily identified when exposed for sale.

Inspections carried out by the Meat Inspectors did not disclose any contraventions.

NUMBER OF VISITS AND INSPECTIONS OF PREMISES DURING THE YEAR 1953.

Slaughterhouses.	Central Market			Meat Shops		Fish Shops		Provision Shops.		Fruit Shops.		Wharves and Vessels.	Cold Stores.	Stalls, Carts, &c.	Food Preparing Factories.	Goods Stations.	Restaurants.
	Meat and Provisions.	Fruit and Vegetables.	Fish.	Wholesale.	Retail.	Wholesale.	Retail.	Wholesale.	Retail.	Wholesale.	Retail.						
1,495	779	528	317	1269	697	43	4	1279	780	471	2	251	40	1091	110	4	1

TOTAL WEIGHT OF MEAT AND OTHER FOODSTUFFS CONDEMNED.

The total weight of meat and other foodstuffs condemned during the year 1953 was 376 tons, 11 cwts., 2 qrs., 7 lbs., comprising :—

	tons.	cwts.	qrs.	lbs.
Beef, Veal, Mutton and Pork	119	19	2	20
Offals	136	19	3	9
Provisions	80	2	..	..
Fish	1	9	1	24
Fruit and Vegetables	38	..	2	10
	<u>376</u>	<u>11</u>	<u>2</u>	<u>7</u>

The following figures show the total weights of carcasses and offals, fish and provisions, etc. (excluding fruit and vegetables) condemned since 1938. For comparison these figures are given at intervals of five years :—

	tons.	cwts.	qrs.	lbs.
1938	127	11	3	1
1943	265	13	3	27
1948	345	10	1	23
1953	338	10	3	25

Condemnation Certificates.

Certificates granted in respect of carcasses, offals, provisions, etc., condemned during the year 1953, numbered 6,294.

Bacteriological Examinations.

During the year, 38 specimens were sent to the Public Health Laboratory for bacteriological examination for the presence of pathogenic organisms, 34 of which were found negative and 4 positive, as follows :—

<i>Material examined.</i>	<i>Result of Examination.</i>	
	<i>Negative.</i>	<i>Positive.</i>
Specimens from 16 beef carcasses	14	2
Specimens from pork carcase	1	..
Tinned steak pudding	6	..
Tinned ham	1	..
Tinned sardines	1	..
Mussels	2	2
Bacon	7	..
Figs	2	..

SLAUGHTERHOUSES.

Five slaughterhouses are in use within the City for the slaughtering of cattle, calves, sheep and pigs, and as these are occupied by the Ministry of Food on behalf of the Crown, licensing of the premises by the local authority is unnecessary.

Two slaughterhouses are licensed within the City for the slaughtering of horses, one at the Cattle Market and one at Byker Hill.

All the slaughterhouses have been regularly inspected, a total of 1,495 visits being made during the year.

Licensed Slaughtermen.

Under the Slaughter of Animals Act, 1933, two slaughtermen's licences were granted during the year, making a total of 59 licensed slaughtermen within the City. All applications for these licences are submitted to, and approved by, the Health Committee.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

During the year, 7,235 visits were made to a total of 2,453 premises, including 2,241 in respect of which reports were received at the Veterinary Department of the presence of rats or mice. Inspection of the premises showed that rats or mice were found infesting 1,514, the remaining 939 being found free from evidence of infestation. Third Party Control work (i.e., baiting, etc.) was carried out on all of the infested premises.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

Number of reports notified by occupiers	2,241
Number of properties where evidence of the presence of rats or mice was found	1,514
Number of visits made.....	7,235
Number of poisoned baits laid	24,373

TYPE OF PROPERTY.				
	Dwelling Houses.	Agricultural.	All other (including Business and Industrial).	Total.
Number of properties inspected	1,162	3	1,291	2,453
Number of properties found to be infested by rats	405	..	318	723
Number of properties found to be infested by mice	446	..	345	791
Number of infested properties treated by the Local Authority.....	851	..	663	1,514

Number of " block " control schemes carried out.....	164
--	-----

LEGAL PROCEEDINGS.

At the Newcastle upon Tyne Police Court a butcher within the City was fined £15 and £3 costs for selling sausage which was intended for, but unfit for, human consumption, in contravention of the Food and Drugs Act, 1938.

H. THORNTON,

VETERINARY OFFICER.

**REPORT OF THE
SCHOOL MEDICAL OFFICER**

VII—SCHOOL HEALTH SERVICE

**SYNOPSIS OF REPORT SUBMITTED TO
EDUCATION COMMITTEE.**

RESUME OF WORK DONE BY THE SCHOOL HEALTH SERVICE DURING 1953.

For the year under review the health of the school population can be viewed in retrospect with a good measure of satisfaction. General fitness as measured by the official classification was maintained, the number of children coming within Category C being very small. Indeed, the majority of children have abundant energy, but few physical defects. There was no unusual epidemic of infectious disease and apart from the occurrence of some resistant impetigo in the later months of the year, there was no special problem in this field. The basic work of systematic Inspection and Treatment proceeded without major incident. Periodic Medical Inspection of children in the various age groups stipulated by the Minister of Education continued in the schools throughout the year. These visits to the schools afford an excellent opportunity for the parents to discuss with the School Medical Officer and Head Teacher the problems relevant to the child's health and education and, also in the case of school leavers, the future occupation of the child. In this connection it is also pleasing to note that the commendable policy of setting up small nurses' clinics, especially in the new schools, is being implemented. There is a valuable saving of educational time, a minimum of inconvenience to parent, teacher and child, and a reduced risk of road accidents.

Some difference of opinion prevails as to the suitability of the age groups to be examined as at present constituted. The interval between first (4-5 years) and the second (10-11 years) statutory examination, is held with some justice to be too long. These intervening years are years of importance and rapid change and development and it is believed that an additional routine examination at 7-8 years would be of real value to the child. In the absence of approval by the Minister for this full group, a minimum requirement at this age level is the determination of visual acuity.

It was of interest to note in the case of some thirty children, born in one week in March, 1946, specially examined and reported upon for the University of London enquiry, that these children lost 411 days during the year on account of sickness, or almost 7 per cent. of their school year's attendance, or, in other words, two working weeks. These children suffered from 90 separate illnesses the chief of which were tonsillitis, colds and bronchitis, while Infectious Diseases

accounted for some 28 per cent. of illness. These findings are demonstrated much more fully in the Durham University and Newcastle Health Department "Thousand Families" enquiry and to which reference will be made in next year's Report.

Medical Inspections.

During the year the following Inspections were carried out :—

A. PERIODIC—

Entrants	7,058	
Second Age Group	3,916	
Third Age Group	2,353	
Other Periodic Inspections	1,547	
		14,874

B. NON-PERIODIC INSPECTIONS—

Special Inspections	8,118	
Re-Inspections	1,313	
		9,431

The Physical State of Children as revealed in the inspections was as follows :—

TABLE 1

Individual pupils found at periodic medical inspection to require treatment (excluding malnutrition, Dental Diseases and infestation with Vermin).

GROUP	For Defective Vision (excluding Squint)	For any other conditions recorded in Table 2	Total individual pupils
Entrants	51	593	624
Second Age Group.....	157	180	292
Third Age Group	70	30	95
Total Prescribed Groups	278	803	1,011
Other Periodic Inspections	80	49	125

TABLE 2

Defects found by Medical Inspection in maintained schools.

Defect or Disease	PERIODIC INSPECTIONS		SPECIAL INSPECTIONS	
	No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation, but not requiring treatment
Skin	97	65	29	72
Eyes (a) Vision	358	402	—	312
(b) Squint	209	107	—	89
(c) Other.....	48	39	338	37
Ears (a) Hearing.....	28	54	—	52
(b) Otitis Media	44	43	168	11
(c) Other.....	36	31	171	39
Nose or Throat	663	358	486	334
Speech	88	57	—	77
Cervical Glands.....	16	207	74	68
Heart and Circulation ..	14	88	—	47
Lungs	96	211	—	314
Developmental				
(a) Hernia.....	12	24	—	3
(b) Other	1	15	—	2
Orthopædic				
(a) Posture	29	33	—	9
(b) Flat Foot ...	97	86	—	41
(c) Other.....	164	170	101	73
Nervous System				
(a) Epilepsy	4	21	—	9
(b) Other.....	26	171	—	29
Psychological				
(a) Development	2	42	—	5
(b) Stability	8	50	—	5
Other	98	176	1,066	714

TABLE 3

Classification of the General Condition of pupils inspected during the year in the Age Groups.

Age Groups	Number of pupils Inspected	A.		B.		C.	
		No.	%	No.	%	No.	%
Entrants	7,058	1,746	24.74	5,042	71.44	270	3.82
2nd Age Group	3,916	1,448	36.98	2,372	60.57	96	2.45
3rd Age Group.....	2,353	1,194	50.74	1,133	48.15	26	1.11
Other Periodic Inspections	1,547	730	47.19	806	52.1	11	0.71
Total	14,874	5,118	34.41	9,353	62.88	403	2.71

At the Kenton Lodge Training College 65 first year and 78 second year students were examined and at the Ashfield Nursery School the medical examination of 35 children was carried out.

At the Clinics the following numbers of consultations have taken place :—

Central	764
Ashfield House	652
Atkinson Road	2,389
Bentinck	1,177
Cowgate	630
East End	1,212
Middle Street	1,294
Total	<u>8,118</u>

The nurses and nursing helpers have paid 1,883 visits to schools and have carried out 87,929 inspections. They have issued to the parents 5,556 notices calling their attention to various conditions found to be affecting the children and have excluded temporarily from school 319 children either for being verminous or for some infectious or contagious conditions.

There have been 23,256 cases receiving treatment at the Clinics and they have attended on 71,999 occasions. In addition, 11,838 cases were examined and, where necessary, referred for treatment either at the Dental Clinics, Orthopædic Clinic, Refraction Clinics or various hospitals in the City. The nurses and nursing helpers have visited 2,245 homes and at the Clinic Baths 4 cases of scabies have been dealt with and 19 baths have been given.

Dental Clinics.

Number of pupils inspected—

(a) Periodic Age Groups	33,203
(b) Specials	5,628
	<u>38,831</u>
Number found to require treatment	19,369
Number referred for treatment	11,753
Number actually treated	10,456
Attendances made for treatment	22,241
Half-days devoted to—Inspections	235
Treatment	3,009
Fillings (a) Permanent Teeth	11,488
(b) Temporary Teeth	481
	<u>11,969</u>
Extractions (a) Permanent Teeth	3,763
(b) Temporary Teeth	12,407
	<u>16,170</u>
Administrations of General Anæsthetic	6,454
Other Operations (a) Permanent Teeth	2,022
(b) Temporary Teeth	414
	<u>2,436</u>
Number of Children fitted with Dentures	112
Number of Children fitted with Orthodontic Appliances	122
Number of Children fitted with Crowns	29

Orthopædic Clinics.

Number of patients in attendance during the year.....	1,849
Number of Examinations carried out by the Orthopædic Surgeons..	2,204
Number of Treatments given by Physiotherapists	15,118

As in the previous year, the services of the Orthopædic Surgeons on three sessions per week were allocated by the Regional Hospital Board and no financial responsibility was attached to the Education Committee.

Ear, Nose and Throat Operations.

Children found to be suffering from Ear, Nose and Throat conditions are referred to the out-patient clinics at the Ear, Nose and Throat Hospitals, where they are examined by one of the specialists who will be performing any operation found to be necessary. The names of the children are then placed on the hospitals waiting lists for operation when beds are available.

During the year the following operations were carried out at the various hospitals in the City :—

Tonsils and Adenoids	439
Tonsils	41
Adenoids	36
Antrostomy	10
Antrum Wash Out	16
Proof Puncture	2
Tonsil Remnants	5
Mastoidectomy	1
Sub Mucous Resection	1
Total	<u>551</u>

Eye Examination Clinics.

Eye Examinations carried out by the School Medical Officers.	1,731
Spectacles prescribed	886
Spectacles not prescribed	845
Spectacles obtained	916

(This figure includes some which were prescribed in 1952 but not obtained until 1953.)

Specialist Eye Examinations carried out by the Ophthalmic Surgeons	1,053
Spectacles prescribed	733
Spectacles not prescribed	320
Spectacles obtained	725

(This figure also includes some which were prescribed in 1952 but not obtained until 1953.)

Children referred to Newcastle Eye Hospital—

(a) For Orthoptic Treatment	247
(b) For Other Eye Conditions	5

REPLACEMENTS AND REPAIRS OF SPECTACLES—

Replacement of Spectacles	203
Replacement of Frames only	164
Repairs to Frames and Lenses.....	663

The sum of £95 19s. 5d. was charged to the Education Committee for these replacements and repairs.

Dr. J. D. Milne and Dr. V. G. O'Leary continued, as in the previous year, to carry out Specialist Eye Examinations on one session per week each. The services of a third Eye Specialist, Dr. L. W. Davies, on two sessions per week were allocated by the Regional Hospital Board in March, 1952, at no cost to the Education Committee.

Speech Therapy.

The Speech Therapy Clinic has continued to progress very satisfactorily. The new Department opened at the Central Clinic in December, 1953.

The following are the details of the children examined and treated during the year :—

Stammer	78
Dyslalia	142
Cleft Palate	6
Dysarthria	19
Retarded Speech Development	7
Others	28
Total	<u>280</u>

No. of Patients admitted during the year	123
(Boys—89. Girls—34.)	
No. of Patients discharged during the year	76
(Boys—50. Girls—26.)	
No. of Treatments given during the year	3,832
(Boys—2,725. Girls—1,107.)	

Mass Radiography.

The survey of school leavers for the Summer and Autumn terms 1953 and the Spring term 1954 has been carried out, and 1,758 boys and 1,565 girls were radiographed at the Newcastle General Hospital.

The number of children, 13 boys and 11 girls, found to require further investigation are divided as follows :—

	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Referred to Chest Clinic or Hospital.....	9	5	14
Referred to Cardiovascular Clinic	—	2	2
Kept under observation at Mass Radiography Unit	4	4	8
Totals	<u>13</u>	<u>11</u>	<u>24</u>

Ringworm.

Ringworm means only lesions caused by *Microsporon* or *Trichophytes*. Yeast infections are therefore not described as Ringworm even though yeasts are moulds.

1. *Cases handed on from 1952—*

Ringworm—Scalp	18	
Body	8	
	—	26
(All fit during the year.)		

2. *New Cases—*

Ringworm—Scalp	18	
Body	50	
Scalp and Body.....	13	
	—	81

3. *Miscellaneous*, including Yeast infections, *e.g.*,
Monilia, non Mycotic lesions, "I.D." Reac-
 tions, *Tinea Versicolor* and *Erythrasma*, etc... 108

The above figures do not include large numbers of contact cases referred by own doctor for diagnosis only (not Ringworm), animals, etc.

Plantar Warts.

At the Central Clinic 117 cases (29 boys and 88 girls) have been treated for this condition. It is caused by a filter passing virus and is known to be infectious. The symptoms include pain on walking or running, the warts being usually limited to the heel or ball of the foot. It is found more frequently in girls.

Treatment was carried out successfully in most cases and 29 boys and 70 girls were cured during the year.

Eight cases failed to respond to treatment and were referred to the Skin Clinic at the Royal Victoria Infirmary for the opinion of a specialist.

Cardiovascular Clinic.

At the Cardiovascular Clinic, Newcastle General Hospital, 23 boys and 25 girls were specially examined and reported upon.

School Leaving Medical Reports.

The arrangements made with the Youth Employment Bureau for a school leaving medical report to be completed in respect of every pupil in their last year of attendance at school, still continued, and reports were completed in respect of 4,076 pupils. Of these, 3,653 were found fit for any occupation. In the case of 423 pupils (298 boys and 124 girls) it was found necessary to advise against certain types of employment.

Special Cases.

238 Special Cases—Physically Handicapped, Educationally Sub-normal or Maladjusted—have been specially examined and reported upon.

National Survey of Health and Development of Children.

The Service has continued to co-operate with the Joint Committee of the Institute of Child Health (University of London), the Society of Medical Officers of Health, and Population Investigation Committee, in an enquiry into the growth, health and development of a sample of children born in March, 1946, drawn from all social classes and from all parts of Great Britain.

Some 30 children were examined and reported on by the School Medical Officers. These children were also followed up by School Nurses and intensive information obtained, which throws a light on the morbidity of the age group.

During the school year, these children lost a total of 411 days on account of sickness, which amounted to 6·85 per cent. of the year's school attendance. Thus on an average each child lost 2 working weeks in the year. Of the 411 days lost, only 98 days were spent in bed, the balance of the time representing convalescence and exclusion from school in the case of communicable illness.

The children suffered from 90 separate illnesses for which the private medical practitioner was called in 39 instances. The types of illness were as follows :—

<i>Type.</i>	<i>No. of Children</i>	<i>No. of days lost.</i>	<i>% of total Absence.</i>
<i>Respiratory—</i>			
Tonsillitis	13	84	20·44
Colds	31	88	21·41
Acute Otitis	1	4	·97
Bronchitis	9	80	19·47
<i>Alimentary—</i>			
Biliousness.....	10	11	2·68
<i>Acute Exanthemata—</i>			
Shingles	3	118	28·71
Acute Poliomyelitis	1		
Infective Mononucleosis	1		
Chicken Pox	2		
Scarlet Fever	2		
Mumps	1	26	6·32
Injuries	4		
Operations	3		
Dental Treatment	3		
Others	6		
Total	90		

Pendower Open Air School.

No. of pupils on Register, 1st January, 1953	124
No. admitted during the year	48
No. discharged during the year	50
No. of pupils on Register, 31st December, 1953	122

Pendower Open Air School—Classes for Partially Sighted Children.

No. of pupils on Register, 1st January, 1953	32
No. admitted during the year	2
No. discharged during the year	6
No. of pupils on Register, 31st December, 1953	28

Bolam Street Day Special School

(for Educationally Subnormal Girls).

No. of pupils on Register, 1st January, 1953	92
No. admitted during the year	21
No. discharged during the year	22
No. of pupils on Register, 31st December, 1953	91

Lower Condercum House Day Special School

(for Educationally Subnormal Boys).

No. of pupils on Register, 1st January, 1953	164
No. admitted during the year	33
No. discharged during the year	41
No. of pupils on Register, 31st December, 1953	156

Residential Special Schools.

The following pupils have been maintained in residential special schools :—

Blind	4
Crippled	99
Epileptic	2
Deaf and Dumb	39
Delicate	7
Partially Sighted	1
Educationally Subnormal	28
Maladjusted	10
Total	<hr/> 190 <hr/>

Maternity and Child Welfare—Orthopædic Scheme.

(The following figures are additional to those already enumerated above)

No. of patients in attendance during the year	432
No. of examinations carried out by the Orthopædic Surgeons	684
No. of Treatments given by Physiotherapists	5,232

APPENDICES.

APPENDIX I.

WORK OF THE NEWCASTLE EXECUTIVE COUNCIL.

(Contributed by K. N. Ogden, Esq., Clerk to Executive Council).

The following data on the work of the Executive Council for the City is supplied :—

On 1st January, 1954, there were 198 doctors (122 practising mainly within the City), on the Medical List. The total number of persons on doctors' lists was 287,632 which was equivalent to 99·3 per cent. of the population of the City based on the Registrar-General's estimate. There were 81 dentists on the Dental List, 89 pharmacies, and 16 surgical appliance suppliers on the Pharmaceutical List ; and 10 ophthalmic medical practitioners, 75 ophthalmic opticians and 3 dispensing opticians on the Ophthalmic List.

1,761,283 prescriptions were dispensed during the year at a cost of £381,159, compared with 1,737,432 prescriptions costing £359,950 in 1952.

During the year, maternity medical services were provided in 2,257 cases in 1,450 of which the doctor providing the services was in attendance at the confinement. The gross fees paid for maternity medical services was £19,613 14s. 7d. The Medical Officer of Health is a member of the Local Obstetric Committee.

Under the Supplementary Ophthalmic Services, 44,734 sight tests were given during the year ended 31st March, 1954, and 36,272 pairs of glasses supplied in addition to 3,425 pairs of bifocals and 2,130 single lenses. It should be borne in mind, however, that these figures include many non-residents of the City who come into Newcastle for sight testing and spectacles.

The total expenditure on the various services administered by the Council during the year ended 31st March, 1954, was as follows :—

	£
General Medical Services	342,649
Pharmaceutical Services.....	329,220
General Dental Services.....	160,685
Supplementary Ophthalmic Services	70,135
Administration	13,067
	<hr/>
	915,756
	<hr/>

This was equivalent to £3 3s. 2·6d. per head of the population.

The following members of the Local Health Authority served on the Executive Council during the period, viz., Ald. J. Chapman, Coun. Dr. D. R. Milligan, Ald. Mrs. D. A. Fitzpatrick, Coun. R. M. Henderson, Coun. Mrs. I. McCambridge, Coun. Mrs. C. C. Scott, Coun. T. D. Smith, together with the Medical Officer of Health.

APPENDIX II.

CURRENT AND FUTURE PROBLEMS IN CHILD WELFARE.

(Joint Report by Dr. W. S. Walton, Medical Officer of Health, and Dr. F. J. W. Miller, Lecturer in Paediatrics, University of Durham, Clinical Adviser in Child Health to the Local Health Authority).

INTRODUCTION.

During recent years a short note dealing with some particular aspect of child welfare has been included in the Annual Report. The scene is, however, altering so rapidly that this year, we think, it would be more profitable, firstly, to give a general review of the changes which have occurred since 1938 and, secondly, to indicate the problems of the present day, and outline those of the future. To do so in any objective sense it is necessary, if possible, to measure these changes in numerical terms, and the most important are the figures for mortality. Indeed, William Farr said that infant mortality is the best single indication of the health and well-being of any community. Certainly this was true in the past, but the time has come when we must accept that other assessments may be necessary. We shall in this report give data relating to still-birth and infant mortality, and to the deaths of children up to the age of 5 years for Newcastle upon Tyne, and we shall compare 1938 with the successive five-year periods. Table I gives the figures for still-births and infantile mortality :—

TABLE I.
STILL-BIRTHS AND INFANT MORTALITY, 1938-1953.

	1938	1943	1948	1953
*Birth Rate	16.1 (4678)	17.8 (4548)	19.4 (5705)	17.0 (4922)
†Peri Natal Mortality Rate	57 (275)	49 (231)	43 (252)	39 (197)
§ Still-birth Rates . . .	34 (166)	28 (133)	27 (159)	23.4 (118)
‡Deaths in 1st week only	23 (109)	21 (98)	16.2 (93)	16 (79)
‡Neo Natal Mortality Rate (Deaths in 1st month)	33 (154)	29.6 (135)	19.8 (113)	19.9 (98)
‡Infant Mortality Rate	66 (307)	64 (291)	38 (217)	26.8 (132)

* Rates per 1,000 population (absolute numbers in brackets).

§ Rates per 1,000 total births (absolute numbers in brackets).

‡ Rates per 1,000 live births (absolute numbers in brackets).

† Still-births and deaths in 1st week per 1,000 total births (absolute numbers in brackets).

From Table I it can be seen that the infantile mortality during the year was 27 as compared with 66 during 1938 (132 deaths in 1953 and 307 deaths in 1938). During these years it has fallen proportionately faster than ever before. The reduction in deaths has been more marked in infants who survived the first month of life but died before reaching the age of one year, and now, 2 out of every 3 children who die in the first year do so in the first month, whereas in 1938 half of the deaths occurred after the first month. The reasons for this change are that deaths after the first month are mainly infective in origin—respiratory and gastro-intestinal—and these are recognised earlier and treated more effectively than was possible 16 years ago. Death in the first month is much more likely to be associated with birth and to be due to congenital abnormality, prematurity or birth injury. There has been a progressive fall in these deaths. Also it is here that the greatest hope remains for the further reduction of infantile mortality. These deaths during the first month of life must be considered together with the still-births, and although further analysis and investigation of the underlying causes are necessary there can be no doubt that the continuing improvement in the standards of education and ante-natal and natal care will bring further reduction. The outstanding problems here are :—

- (1) The investigation of the causes of prematurity ;
- (2) An attempt to reduce its frequency ;
- (3) Further measures to look after the premature child once it is born.

We estimate that the infantile mortality in Newcastle could be reduced to a figure in the region of 20, and if so, proportionately about 15 of these deaths would occur in the first month and the other 5 from the end of the first month to the end of the first year.

The figures concerning illness in infancy are not available from any official source. Indeed, illness in infancy and early childhood is so frequent that notification and regular collection would be impossible. The study of "a thousand families" has, however, enabled us to give the figures relating to Newcastle. These are given in the book "A Thousand Families in Newcastle upon Tyne," published by the Oxford University Press, in a way which has never been possible before. Briefly, they are that about one-fifth of infants manage to escape significant infective illness in the first year of life but that the remainder have an average of two such illnesses each. Respiratory infection is by far the most common type of illness, followed by infections causing

diarrhœa and vomiting, and skin sepsis. The dramatic and important illnesses of infancy are rare in comparison with the common infections, and we recorded only 18 examples of important but rare diseases as against almost 14,000 total illnesses. Yet the effective treatment of such illnesses depends in the first place upon the recognition of untoward symptoms by the family and thereafter the appreciation of the possible significance of these symptoms by nurses or doctors. It is to this end that the training of doctors, nurses and health visitors should be adjusted. It will also be apparent, reading the report, how much further general education is required in the prevention of accidents in the home, prevention of contact with tuberculosis and other preventable diseases, and accordingly we are endeavouring to increase facilities for general health education on these lines in the City.

The Toddler and Pre-School Child.

Great as has been the change in infant mortality, the fall in deaths of young children has been even more striking. Whereas the number of children dying under the age of one year in 1938 was 307, in 1953 the number had been reduced to less than one-half, viz.: 132. During the same period 1938-1953, deaths amongst children between 1-5 years had fallen from 81 (1938) to 18 (1953) or to less than one quarter of those occurring in 1938.

<i>Deaths.</i>	1938.	1953.
Under one year of age	307	132
One to five years of age	81	18

TABLE II.
DEATHS OF CHILDREN IN NEWCASTLE UPON TYNE
AT 5-YEARLY INTERVALS SINCE 1938.

	Population 1938	1938	1943	1948	1953	Population 1953
1-2 years..	4,350	37	34	16	6	4,800
2-5 years..	12,350	44	44	19	12	16,100
	16,700	81	78	35	18	20,900

This is all the more remarkable when one can say that the population from 1-5 was greater in 1953 than in 1938. So that the difference in the death rate is even greater than the change in the absolute figure. It is well worth while looking at the alteration in the principal causes of death in children from 1-5 in these years, given in Table III which also records the changes in deaths under the age of one.

TABLE III.
DEATHS OF CHILDREN FROM PRINCIPAL CAUSES IN
NEWCASTLE UPON TYNE—5-YEARLY INTERVALS SINCE 1938.

	1938			1943			1948			1953		
	-1	1-4	Total -5	-1	1-4	Total -5	-1	1-4	Total -5	-1	1-4	Total -5
Tuberculosis..	1	11	12	1	15	16	1	10	11	1	2	3
Respiratory Disease.....	51	23	74	72	20	92	40	5	45	14	4	18
Digestive (incl. D. & V.)	57	8	65	39	3	42	34	1	35	4	2	6
Congenital Malformations	28	2	30	27	2	29	22	3	25	31	1	32
Prematurity .	74	..	74	63	..	63	68	..	68	37	..	37
Birth Injuries.	19	..	19	12	..	12	14	..	14	11	..	11
Violence	3	5	8	3	8	11	10	7	17	8	2	10

Table III shows, just as in the case of children under the age of one, that the change has occurred in deaths due to acute infective illness. In 1938, 23 children between the age of 1 and 5 died of acute respiratory infection, and in 1953 only 4; in 1938, 8 children died from acute abdominal disease and only 2 in 1953. Tuberculosis killed 11 children aged between 1-5 years in 1938 and only 2 in 1953. Deaths amongst young children are being steadily reduced, and conditions other than infective illness, such as accidents and malignant disease, are now becoming the chief causes of deaths.

With this marked reduction in mortality comes the necessity to look behind the mortality figures and to study the illnesses in the childhood population, and here again we shall be greatly helped in our understanding of the situation as the results of the joint study of a thousand families become available. It will not be possible to publish a full report for about two years, but at this stage we can say that the pattern of illness in the first five years is different from that in the first year. As will be seen in Table IV, respiratory disease is the commonest cause of illness, and more than half the volume of illness in the children of 850 families in the first five years is caused by infections of the respiratory tract. The chance of severe infection of the respiratory tract, however, diminishes as the child becomes older. From Table IV it can also be seen that there is still a very large volume of illness and that it is concerned largely with respiratory infection and the infectious fevers.

TABLE IV.

ILLNESS IN 847 CHILDREN AGED 1-5 YEARS.

Respiratory Infection	3,757
Severe cold	1,621
Tonsillitis.....	842
Bronchitis	628
Pneumonia	82
Undifferentiated Respiratory Disease	584
Infectious Fevers	1,419
Primary Tuberculosis.....	61
Diarrhoea and Vomiting	793
Staphylococcal Infection.....	341
Acute Infection of Unknown Origin.....	184
Stomatitis	114
Other	95
Hepatitis	22

SUMMARY.

This brief review indicates the facts of death and illness in children in the first 5 years in Newcastle upon Tyne. It is likely that there will always be illness in the community, but the task of the combined medical authorities, the local health authority and hospital authority, is to work together to ameliorate the effects of such inevitable illness.

We have demonstrated the very satisfactory reduction in deaths, but we have just touched upon the volume of illness which still requires care and which, if recognised and treated properly, need not so damage the young child or alter its growth, that illness in the first five years of life leads to ill-health afterwards.

We would give as our opinion that the Local Health Authority should continue :—

- (1) Their constant efforts to plan the domiciliary health services with those of the family doctor, and encourage and assist him in his efforts to teach preventive medicine.

- (2) To show concern for the training of nurses and health visitors, and to have the arrangements for child welfare constantly under review in order that recent advances in knowledge or in practice are incorporated rapidly into the teaching and practice of the medical and nursing staff.
- (3) To maintain some active study of the community for which it is responsible in order that the changing aspects of epidemiology of disease and the facts concerning the health and well-being of the community are always available. Such studies bring to the community a quickening of interest and a sense of purpose which, apart from the ascertainment of fact, help to repay their cost. We consider that the "thousand family" survey has been an outstanding example of the way in which a Local Authority and a University Department can unite for study of a matter of common interest.

APPENDIX III.

ONE HUNDRED YEARS AGO.

NEWCASTLE UPON TYNE—1853.

There occurred in Newcastle during the year 1853 a severe outbreak of Cholera and during the 9 weeks between September 1st and November 4th out of a total population of about 90,000, 1,533 persons died from the disease. This outbreak had followed others during the years 1839 to 1853. So serious was the 1853 epidemic that three Commissioners were appointed by the General Board of Health and they prepared a long report of some 578 pages after holding a public inquiry.

The preamble is of interest :—

“ To the Queen’s Most Excellent Majesty.

We, by your Majesty’s Letters Patents of the 31st December, 1853, appointed ‘ to be the Commissioners for inquiring into the causes which have led to, or have aggravated, the late outbreak of Cholera in the towns of Newcastle upon Tyne, Gateshead and Tynemouth,’ herewith humbly submit to your Majesty :

That, immediately upon the issuing of the said Letters Patents, we proceeded to the said town of Newcastle upon Tyne, and there, in the Town Hall, on the 5th January, 1854, in the presence of the Mayors, Town Clerks, and others, the officers and inhabitants of all the said three towns, duly opened and read the said Letters Patents and held a public meeting under and by virtue thereof ; and that, after having advertised in all the local papers during two successive weeks our intention to that effect, and having also invited any and all persons to appear and tender evidence, we proceeded, in the Town Hall of Newcastle, on the 19th, and thence *de die in diem* till the 30th January, and again on the 7th, 10th, and 11th March, to take evidence upon oath relative to that town :—examining altogether about seventy witnesses, including four Superintending Inspectors of the General Board of Health ; thirteen medical officers of the Newcastle charitable institutions ; all the five medical officers of the Newcastle Poor Law Union ; eight other medical practitioners ; and several aldermen, magistrates,

and other members and officers of the Corporation of Newcastle, and of the Board of Guardians there, besides other persons :..... we now beg humbly to report as follows :—

And Firstly, as Regards Newcastle : ”

And then followed 100 sections of the findings under this heading.

A summary of certain of the submissions is of interest if only to demonstrate what were the problems of those days :—

2. That 1,533 persons perished in 9 weeks of a population of 90,000—being a mortality of more than 1 in 60.

The Board of Guardians returned particulars of the distribution of the 1,533 fatal cases as follows :—

<i>Parishes.</i>		<i>Townships.</i>	
All Saints	450	Jesmond	11
St. Nicholas.....	113	Elswick	43
St. Andrews	251	Westgate	291
St. Johns	229	Benwell	13
		Byker	132

There were no deaths in the rural townships of Fenham and Heaton.

3. That the death rate in 1853 was 43·3 (1953—11·88) and the mortality among every 1,000 inhabitants had averaged 28·6 during the 15 years 1839–1853 (corresponding average 1939–1953 was 13·1).
8. That for each of the 1,000 fatal cases produced in Newcastle upon Tyne, there had been produced several non-fatal severe or aggravated cases.
12. The indication of sanitary defects and grievances is sufficient to account for almost any extent of preventable disease and mortality.
14. The medical reports of the Medical Charitable Institutions and of
15. the Newcastle and Gateshead Sanitary Association and of the & Newcastle Dispensary have consistently drawn attention to un-
20. healthy and insanitary areas.
27. “ That there are considerable districts, especially in the lower and older parts of Newcastle, in which almost all the houses are built back to back, so as to be incapable of through ventilation, and with their fronts within so few feet of one another, as to render it almost impossible for sunshine, wind or rain to reach directly even their exterior walls ; many of these miserable lanes or entries being moreover closed up or covered over at one or even at both ends.”

28. "That in the district known by the name of Sandgate there are a number of narrow lanes and entries, extending from the thoroughfare of that name and from St. Ann's Street northward to the New Road and southward to the Quay, whose aggregate length exceeds a mile, while their average breadth at the bottom but rarely exceeds four feet; the upper stories of the houses, many of which are lofty, often projecting over the lower ones, so as to leave at the top nothing but a mere chink or rift for light and air to make their way through."
29. "That, on entering some of the houses in such localities during our day-inspections of the town, we were arrested at the door by a darkness which was little less than total, and were obliged to wait a moment or two before we could see sufficiently well to grope our way up the stairs; and that more than one of the parochial medical officers have spoken to the fact of their sometimes labouring under the necessity of taking a candle, in order to see their patients in some of the rooms in these places, even at noonday in the height of summer."
34. "That the far too frequent practice of building privies and ash-pits, where such conveniences exist at all, against the walls of houses, so as occasionally to allow of the liquid filth oozing directly through the walls into living and sleeping rooms, and so as habitually to bring these 'poison pits' directly alongside or below them or otherwise close to their doors and windows, is another instance of the artificial and gratuitous aggravation of sanitary evils; and that, owing to the custom of allowing heaps of filth to accumulate in the corners of courts and entries against the walls of houses, every shower of rain, by saturating these heaps, tends to render and keep damp the walls of the adjoining houses, even where the means of ordinary surface drainage are not wanting."
35. "That there are districts in Newcastle which, in the totality of sanitary evil, or in respect of the many sanitary defects simultaneously exhibited, are, according to three Superintending Inspectors of Health, whom we have examined, more mis-conditioned probably than any other districts of anything like the same area in any other town in Great Britain;"

45. "That there are stated to be about 9,453 houses in the whole Borough and 20,000 families or thereabouts, or on the average rather more than two families to each house throughout the Borough; that of those 9,453 houses, 6,900 or thereabouts are stated to be occupied as 'self-contained houses' by as many single families, leaving about 2,553 houses to be occupied in tenements by the remaining 13,100 families, which gives an average of rather more than five families to each 'tenemented house' throughout the Borough;"
47. "That in 1847 the sub-committee of the Newcastle and Gateshead Sanitary Association in their inspections of certain entries in Sandgate found 'from nine to seventeen persons in one room'; . . ."
48. "That in consequence of the frequent ill construction, ill ventilation and overcrowding of the habitations of the poorer classes (as well as of the want of sewerage, drainage, proper domestic conveniences and other matters hereafter to be adverted to) the condition of many of the tenements, which form the residences of about three-fourths—and especially the condition of many of the single-room tenements, which form the residences of about half of the entire population of Newcastle, has habitually been 'filthy and unwholesome', even where not technically describable as 'unfit for human habitation'; that the stench experienced on entering some of them is in the highest degree offensive, so as occasionally to cause nausea and vomiting, even among persons who from their avocations might be expected to be more or less inured thereto; and that the effects of all this upon the health of the inmates and of the vicinity generally can only be equalled by the corresponding effect upon their morals and sense of decency."
59. "That of the 9,453 houses or thereabouts in the whole borough of Newcastle, only 1,421 or thereabouts even now have water-closets or fæcal house-drainage; the remaining 8,032, or more than five-sixths of the whole, being still entirely unprovided in that respect.

That of the 9,453 houses in the borough only 5,461 are drained in any way or to any extent; 3,992, or more than two-fifths of them, being utterly and entirely without drains of any kind or sort, even for carrying off rains floods."

62. To the effect that the state of the few existing sewers was deplorable.
71. “ That the flagging, paving or macadamizing of the chief thoroughfares in the better and central parts of Newcastle appears to be both good and substantial; but that in the narrow lanes and entries on either side of these thoroughfares, and in many parts of the suburbs, it is decidedly and seriously deficient, both in quantity and quality ;”
74. “ That the scavengage of the borough of Newcastle at large, down to and at the time of the late outbreak, was deficient in the most deplorable degree; that, the Corporation not having taken or obtained control over the highways of the townships until about a month before the late outbreak, no scavenging whatsoever appears to have taken place in them,”
82. “ That another very considerable source of detriment to the sanitary condition of the town during the late outbreak arose from the excessive contamination of the atmosphere there, not merely by ordinary smoke, but also by acrid and offensive fumes from alkali and other chemical-product works, factories, etc., of which it is alleged that no town for its size possesses more than Newcastle;” and the section proceeds to state that under the Newcastle Local Improvement Act, 1846, all furnaces, etc. “ should be constructed so as to prevent or consume, so far as is practicable, their own smoke ” with cumulative penalties against offenders.

Other sections dealt with conditions of water supply, of the slowness of the Corporation in exercising sanitary powers which it possessed under Local Acts and bye laws, of complaints against the General Board of Health regarding help afforded through its inspectors.

100. Drew attention to the exceeding waste of money (to say nothing further of life health, etc.) which resulted from the 1853 epidemic. Costs were estimated to include :—

Board of Guardians—Immediate Services	£4,000
Board of Guardians—Widows’ and Dependents’ Pensions (annually)	£2,600
Vicar of Newcastle	£6,000
Benefit Societies—sick and funeral monies	£3,000
Corporation	£500

“ That the judicious expenditure of a similar sum a few months before the outbreak might have done much to avert or mitigate that calamity, not only for the 1853 but for many years to come ; whereas, under actual circumstances, there has been nothing but a dead loss of so much money, without the slightest defence or guarantee having been obtained against the recurrence of a similar calamity, even in the autumn of this very year 1854,* supposing the cholera should again make its appearance in the neighbourhood during the summer.”

* This report, referring to 1853, was published in 1854.

APPENDIX IV.

TUBERCULOSIS IN CHILDHOOD IN NEWCASTLE upon TYNE.

Contributed by Dr. MARY TAYLOR, Childhood Tuberculosis Officer.

In the Annual Report for 1949, Dr. F. J. W. Miller drew attention to the fact that in this city from 1939-1949, tuberculosis was the greatest single cause of death in children aged 1 — 14 years, and that it was responsible for a quarter of all deaths in this age group (Table 1). In the country as a whole at that time tuberculosis followed violence and acute respiratory disease as the third greatest cause of death at this age.

TABLE 1.

Newcastle upon Tyne 1939—1949.

Deaths from Tuberculosis Compared with other Deaths.

Age.	Total Deaths.	Tuberculosis.	%
1- 4 years	570	124	21.7
5-14 ,,	561	141	27.0
	1131	265	23.0

Since then conditions have changed. Deaths from tuberculosis in childhood (0—14 yrs.) are becoming less common. In 1950 there were 13 deaths, in 1951 there were 6, and in 1952 and 1953 four deaths each year.

Whereas tuberculosis was responsible for a quarter of all deaths in the city in the age group 1—14 yrs. in 1939-49, it was only responsible for an eighth of those deaths in the years 1950-53 (inclusive). (Table 3).

TABLE 2.

Deaths from Tuberculosis in Newcastle-on-Tyne.

Age.	1938	1943	1948	1953
— 1 yr.	1	1	1	1
1— 4 yrs.	11	15	10	2
5—14 yrs.	15	17	5	1
	27	33	16	4

TABLE 3.

*Deaths from Tuberculosis Compared with Other Deaths.*1950—1953 (*Inclusive*).

Age.	Total.	Tuberculosis.	%
1- 4 yrs. . .	99	13	13.1
5-14 „ . .	78	10	12.8
	177	23	13.

Almost all deaths from tuberculosis in childhood are due to tuberculous meningitis or miliary tuberculosis following primary infection. Until 1947 there was no effective treatment for these complications, and death was almost inevitable. Streptomycin and other drugs are now effective and available, and offer hope of recovery but treatment necessitates a long period in hospital, and even then only half of those treated make a complete recovery. Early diagnosis offers the best hope of recovery.

The Incidence of Tuberculous Infection.

The number of deaths is but a reflection of the total amount of illness and we need to know more about the number of children infected. A tuberculin survey in 1953 among 5 year old schoolchildren in Newcastle showed that 3.8% of these children were tuberculin positive, but that 40% of these were already under supervision. The Thousand Family Investigation also suggested that 7.5% of city children were infected by the age of 5 years.

Regular tuberculin testing is a very necessary and desirable addition to the school medical examination. It would operate as a protection to the child and as the source of important information concerning the spread of tuberculosis in children.

Prevention of Infection.

Tuberculous infection in young children is almost always associated with close contact with an infected adult. Measures at present taken to reduce this infection are as follows :—

(1) Adults suffering from tuberculosis are admitted to hospital, as soon as possible after diagnosis and sometimes within days. This is a great improvement upon the position obtaining a few years ago, and is due to the more adequate provision of hospital beds by the Regional Hospital Board.

It is known that there are about 450 adults in the city who are suffering from chronic infectious tuberculosis. A study is at present being made concerning the social conditions and habits of these people and will be described in a subsequent report.

(2) The regular examination of children in contact with tuberculosis permits the earlier diagnosis of dangerous complications of primary infection and also picks out those suitable for B.C.G. vaccination.

The Children's Contact Clinics, established in 1941 have been re-organised and extended. Two sessions are now held weekly, one at the East End Health Centre and one at the General Hospital. Children are referred by the Chest Physicians, family doctors, hospitals and health visitors and are seen by appointment. Those who are found to be tuberculin positive are x-rayed, seen regularly, and if necessary admitted to hospital. Those who are tuberculin negative are offered B.C.G. vaccination.

A report of the work of this clinic in 1953 is presented on page 102.

Children of school age are seen at special sessions on Saturday mornings at the two Chest Clinics.

(3) Since B.C.G. first became available for child contacts in 1950, each succeeding year has seen a steady increase in the proportion of children, who at their first visit to the Contact Clinics have been tuberculin negative, and therefore suitable for B.C.G. vaccination. It is also becoming more generally realised that arrangements for vaccination in the case of new-born infants should be considered during the ante-natal period. When there is an infective adult in the house some arrangements should be made for segregation of the expected infant until tuberculin conversion has occurred, and if the adult cannot be accommodated elsewhere the infant may have to be delivered in hospital. This necessitates co-operation between family doctors, midwives, chest physicians and obstetricians.

The B.C.G. vaccination of school leavers is not primarily concerned with the prevention of tuberculosis in childhood, it is a measure to reduce the incidence of disease in the adolescent and young adult and need not be considered here.

(4) In the Maternity Hospitals it is now routine practice to x-ray patients accepted for delivery, to arrange for segregation from their infants where active tuberculosis is found and to give B.C.G. vaccination where it is indicated.

Unfortunately, only a small number of the women who are delivered at home are referred for this radiological examination which should be a matter of routine.

(5) Doctors, parents and the general public all show greater appreciation of the dangers of tuberculous infection in young children. This is evidenced by the almost universal pasteurisation of milk, greater reluctance to expose young children to the chance of infection, and requests for B.C.G. vaccination where a risk of infection is suspected.

(6) More could be done to eliminate active tuberculosis in adults who are responsible for the care of children or who come into contact with children in their daily work. It is now usual for hospital and nursery nurses to have regular chest x-rays, but it is still not an accepted practice for school teachers. Student teachers must be x-rayed and the local authority requires a chest x-ray before a new appointment is made to a school staff, but once appointed further x-rays are not obligatory. Teachers known to be suffering from tuberculosis cannot return to work until there is no danger that they are infective.

In all these ways, increasing knowledge, increasing awareness of the facts and dangers of tuberculosis, the possession of an instrument for protection against the major complications of infection, and of an effective therapeutic agent for treatment, the toll which tuberculosis exacts from the children of Newcastle is being steadily reduced.

The deaths from 1950-1953 numbered only 23 whilst those from 1940-1943 were 120, but there is much more to do. Some 4 - 5% of the population under 5 years of age is infected at any given time. Once infected there is always the risk of illness which in still too many children requires hospital treatment, and might well effect a change in the whole course of their lives.

Prevention of infection must remain our hope, and our aim should be a childhood population free from infection with the tubercle bacillus.

